

2016 Q1 RELIABILITY REPORT

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1.0 OVERVIEW OF CYPRESS SEMICONDUCTOR, INC. TOTAL QUALITY MANAGEMENT SYSTEM

This report summarizes Cypress Semiconductor Product Reliability for the period of the 1st quarter of 2016. It includes data from devices fabricated at both internal Cypress and external subcontractor wafer fabrication and assembly facilities.

Cypress Semiconductor has established aggressive reliability objectives. The quality standard at Cypress is zero defects, driven by a culture requiring continuous improvement in quality and reliability.

Product reliability is assured by a total quality management system. The quality management system is described in detail in the Cypress Semiconductor Quality Manual (Cypress Semiconductor Document Number 90-00001). Key reliability-related programs of the total quality management system are: (1) design rule review and approval; (2) control of raw materials and vendor quality; (3) manufacturing statistical process controls; (4) "Maverick Lot" yield limits; (5) formal training and certification of manufacturing personnel; (6) qualification of new products and manufacturing processes; (7) continuous reliability monitoring; (8) formal failure analysis and corrective action; and (9) competitive benchmarking.

Product Reliability data is accumulated as a result of new product Qualification Test Plan activities (Cypress Semiconductor Document Number 25-00040) as well as from the Reliability Monitor Program (Cypress Semiconductor Document Number 25-00008). All reliability test samples are obtained from standard production material. Sample selection is based on generic product families. These generic products are designed with very similar design rules and manufactured from a core set of processes.

Reliability strategy requires that every failure that occurs during reliability testing be subjected to failure analysis (Cypress Semiconductor Document Number 25-00039) to determine the failure mechanism. Corrective action is then implemented to prevent future failures, resulting in continuous improvement in product reliability.

Sabbas Daniel
Executive Vice-President, Quality

2.0 PRODUCT RELIABILITY

In product stress testing, the main emphasis is on the useful life section of the bathtub curve. The test methodology used to predict the useful life period is a life test under a dynamic bias and at temperatures of 125°C or 150°C at the maximum specified use voltage of the product. The duration at these temperatures is 1,000 and 500 hours, respectively.

At Cypress, product reliability tests are performed as part of both the qualification processes and the standard reliability monitoring program. Each fab site and technology family from each product line is sampled. These reliability tests utilize the following stress factors to accelerate failure: temperature, current and /or voltage. The product reliability tests currently employed at Cypress include Early Failure Rate (EFR) and Long Term Failure Rate (LFR).

2.1 EARLY FAILURE RATE SUMMARY

Early Failure Rate Determination: High Temperature Operating Life testing (HTOL), for as long as 96 hours, is used to estimate device early failure rate. This stress will typically correspond to the first 2000 hours of device operation in a system environment. The remainder of the device's lifetime is characterized with extended LFR testing (See Section 3)

Test : High Temperature Operating Life Test (HTOL)
Conditions : Dynamic Operating Conditions, VCC nominal + 15%, 150°C or 125°C.
Duration : 48 hours HTOL at 150°C or 96 hours at 125°C.
 (Refer to Appendix C for derating factor calculation)
Failure : A failure is any device that fails to meet data sheet electrical requirements.

Table 1. Early Failure Rate Summary

Technology	Device Hours	Qty	PPM	Failure Mode
LL65	1,791,047	52,361	0	None
R52	245,433	6,606	0	None
R9	312,768	6,516	0	None
R95	513,205	15,739	0	None
S4	453,629	9,291	0	None
S8	4,604,958	93,558	53	1-NVD (See Note 1) 1-Wire to Wire Short (See Note 2) 3-Functional (See Note 3)
130nm TI F-RAM	433,270	13,991	0	None
Grand Total	8,354,311	198,062	25	See above

Notes:

- 1) Will be covered by Fab's continuous defect improvement.
- 2) CAR# 201530013 – Optimized wirebond layout
- 3) CFOS-51/TTO-859 - Changing post etch and post alloy wet clean (Fab process)

2.2 LONG TERM FAILURE RATE SUMMARY

A High Temperature Operating Life test (HTOL) is used to estimate long-term reliability. By operating the devices at accelerated temperature and voltage, hundreds of thousands of use hours can be compressed into hundreds of test hours.

Test : High Temperature Operating Life Test (HTOL)
Conditions : Dynamic Operating Conditions, VCC nominal +15% 150°C or 125°C.
Duration : A minimum of 80 hours at 150°C or 168 hours at 125°C
 Generally 500 hours at 150°C or 1000 hours at 125°C.
 (Refer to Appendix C for derating factor calculation)
Failure : A failure is any device that fails to meet data sheet electrical requirements.
Fit Rate : Derated to 55° C ambient, with 60% upper confidence bound for 0 failures,
 $E_a = 0.7\text{eV}$ (Refer to Appendix A)

Table 2. Long Term Failure Rate Summary

Technology	Device Hours	# Failed	FIT Rate	Failure Mode
B53	115,500	0	Insufficient	None
C8	94,248	0	Insufficient	None
C9	94,248	0	Insufficient	None
LL65	663,000	0	8	None
R52	65,280	0	Insufficient	None
R7	275,664	0	20	None
R9	170,500	0	32	None
R95	206,610	0	26	None
S4	518,335	0	10	None
S8	1,763,670	0	3	None
130nm TI F-RAM	240,209	0	22	None
Grand Total	4,207,264	0	1.3	None

Note:

1) Insufficient data – interpret as insufficient accumulated life-time hours to project a 60% confidence bound for a zero-fails sample.

2.3 DATA RETENTION SUMMARY

A high-temperature, non-biased bake test ensures that data retention meets established reliability goals. The devices are baked without bias at either 150°C for plastic-packaged devices, or 250°C for hermetically-packaged devices. DRET is performed on programmed devices to establish a failure rate for cell charge loss. The reliability at nominal system ambient temperature is related to the failure rate at elevated temperatures through the Acceleration Factor equation.

Test : Data Retention Testing (DRET)
Conditions : High temperature non-biased bake
Duration : A minimum of 500 hours at 150°C or 168 hours at 165°C
 Generally 1000 hours at 150°C or 500 hours at 165°C.
Failure : Devices are programmed with a worst case program pattern before being subjected to data retention testing. The reliability at nominal system ambient temperature is related to the failure rate at elevated temperatures through the Acceleration Factor equation.

Table 3. Data Retention Failure Rate Summary

Technology	Activation Energy	Device Hours	# Failed	FIT Rate	PPM	Failure Mode
S8	0.7 eV	1,871,664	0	1.2	0	None
130nm TI F-RAM (125C/1000H)	1.4 eV	240,000	0	0.6	0	None
130nm TI F-RAM (125C/1500H)	1.4 eV	702,000	0	0.2	0	None
130nm TI F-RAM (150C/1000H)	1.4 eV	320,000	0	0.5	0	None

3.0 PACKAGE RELIABILITY

Package-level reliability testing refers to the assessment of the overall reliability of the device in packaged form. This consists of subjecting packaged samples to reliability tests that expose the various sample sets to different stress conditions, after which the samples are tested for any degradation.

At Cypress, package reliability tests are performed as part of the qualification processes and as part of the standard reliability monitoring program. The reliability test employed is chosen based on the failure mechanism, as different stress tests accelerate different failure mechanisms. These reliability tests utilize one or more of the following stress factors to accelerate failure: temperature, moisture or humidity, current, voltage, and pressure. The package reliability tests currently employed at Cypress include Pressure Cooker Test (PCT), Highly Accelerated Stress Test (HAST), Temperature Cycle Test (TCT), and High Temperature Storage (HTS). Figure 1 shows the Cypress package reliability stress flow.

Surface-mount samples are preconditioned per Jedec Std JESD22-A113 prior to package reliability testing. This is required prior to TCT, PCT and HAST testing. Preconditioning simulates the board mounting process of the customer. It normally consists of a temperature cycle to simulate exposure to different temperatures during shipping, a bake to drive away the moisture inside the packages of the samples, a soak to drive a controlled amount of moisture into the package, and three cycles of convection reflow. Packages are soaked and reflowed based on their shipping moisture sensitivity classification. The samples are tested (acoustic and electrical) after preconditioning, failures from which are considered as preconditioning failures and not reliability failures. Preconditioning failures should be taken seriously, since these imply that the samples are not robust enough to withstand the board mounting process.

Cypress conducts all major classes of package reliability tests on each of its package families. The package characteristics and assembly locations are the primary considerations when grouping packages into package families. A package family may consist of a group of 44-lead to 144-lead TQFP packages manufactured at a particular manufacturing location.

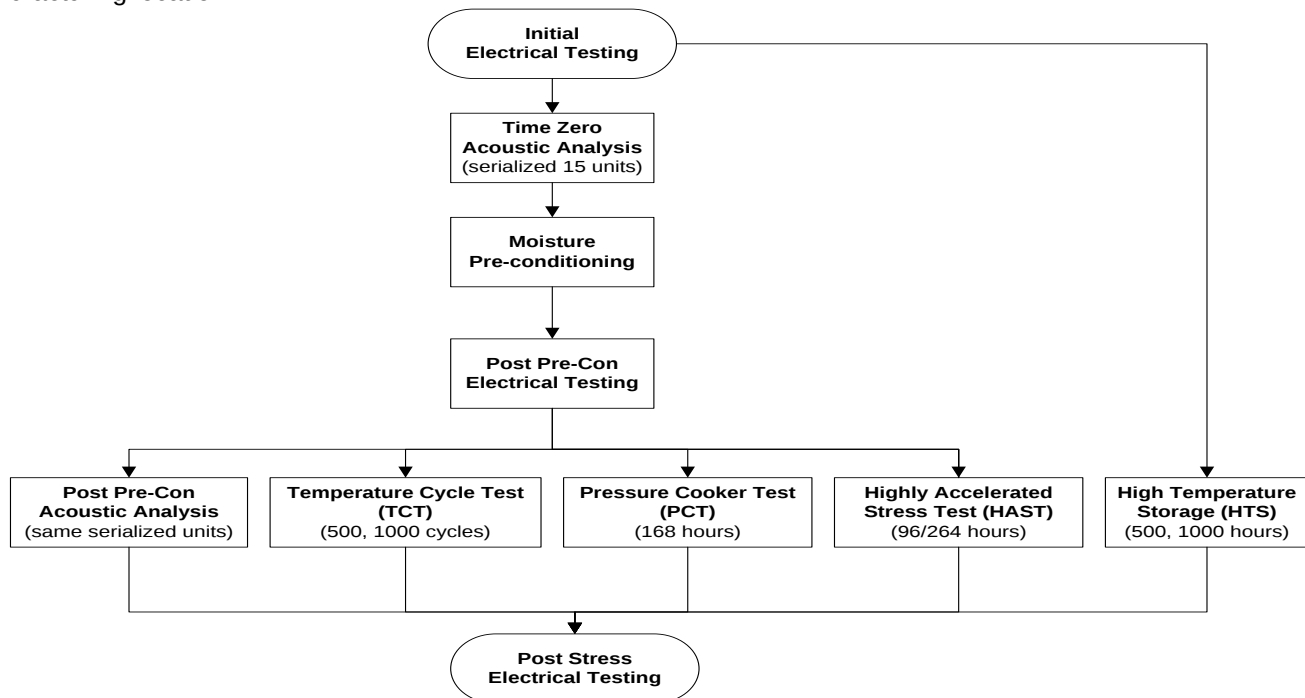


Figure 1. Cypress Package Reliability Stress Flow

3.1 PRESSURE COOKER TEST (PCT)

The Pressure Cooker Test is a highly accelerated packaging stress test used to ensure environmental durability of epoxy-packaged parts. Passivation cracks, ionic contamination, and corrosion susceptibility are all accelerated by this stress.

Conditions : 15 PSIG, 121°C, No bias, for a minimum of 168 hours.
Pre-Conditioning : 5 cycles Temperature Cycle –65/+150, 24 hr Bake 125°C, Moisture loading to qualified MSL level
Failure Modes : Parametric shifts, high leakage, and/or catastrophic
Failure Mechanism : Die corrosion or contaminants such as foreign material on or within the package materials. Poor package sealing.

Table 4. Pressure Cooker Test Failure Rate Summary

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	2,904	0	0	None
FBGA (1.0-1.27)	90	0	0	None
FBGA (1.0-1.27, Pb-free)	576	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	1,436	0	0	None
UFBGA (Pb-free)	237	0	0	None
FLIPCHIP BGA (Pb-Free)	160	0	0	None
FLIPCHIP CSP (Pb-Free)	898	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	146	0	0	None
QFN (Saw Type, Pb-Free)	5,341	0	0	None
QFN (Punch Type, Pb-Free)	59	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	180	0	0	None
DFN, 0.8mm Thickness (Saw Type)	573	0	0	None
PDIP (Pb-Free)	1,224	1	0.08%	Lifted Ball (See Note 1)
PLCC (Pb-Free)	29	0	0	None
QSOP (Pb-Free)	90	0	0	None
SOIC (Pb Free)	3,936	0	0	None
SOJ (Pb-Free)	616	0	0	None
SNC (Pb-Free)	118	0	0	None
SSOP (Pb-Free)	1,291	0	0	None
TQFP (Pb-Free)	3,255	0	0	None
TQFP (Exposed Pad)	77	0	0	None
TSOP (Pb-free)	427	0	0	None
TSOP I (Pb-Free)	240	0	0	None
TSOP II (Pb-Free)	2,300	0	0	None
TSSOP (Pb-Free)	210	0	0	None
Grand Total	26,413	1	0.004%	See above

Note:

1) CAR# 201542014- Optimized wirebond parameter

3.2 HIGHLY ACCELERATED STRESS TEST (HAST)

Cypress uses HAST to accelerate temperature, humidity, bias failure mechanisms. This change was necessary because our package reliability had improved to the point where the old 85°C/85% R.H. temperature-humidity-bias testing would not induce failures. Failures are necessary to judge progress and compare packaging changes. HAST testing has been shown to be at least twenty times more accelerated than 85°C/85% R.H. temperature-humidity-bias testing.

Conditions	:	Present Conditions: 130°C/110°C, 85% RH minimum power dissipation, for a minimum of 96/264 hours.
Pre-Conditioning	:	5 cycles Temperature Cycle –65/+150, 24 hr Bake 125°C, Moisture loading to qualified MSL level
Failure Modes	:	Parametric shifts, high leakage, and/or catastrophic
Failure Mechanism	:	Die corrosion or contaminants such as foreign material on or within the package materials. Poor package sealing.

Table 5. Highly Accelerated Stress Test (HAST) Failure Rate Summary

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	1,371	0	0	None
FBGA (1.0-1.27, Pb-free)	265	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	901	0	0	None
FLIPCHIP BGA (Pb-Free)	116	0	0	None
FLIPCHIP CSP (Pb-Free)	60	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	89	0	0	None
QFN (Saw Type, Pb-Free)	1,162	0	0	None
QFN (Punch Type, Pb-Free)	59	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	150	0	0	None
DFN (0.8mm Thickness, Saw Type)	260	0	0	None
PLCC (Pb-Free)	30	0	0	None
PDIP (Pb-Free)	267	0	0	None
QSOP (Pb-Free)	90	0	0	None
SOIC (Pb Free)	2,407	0	0	None
SOJ (Pb-Free)	310	0	0	None
SNC (Pb-Free)	119	0	0	None
SSOP (Pb-Free)	573	0	0	None
TQFP (Exposed Pad)	22	0	0	None
TQFP (Pb-Free)	857	0	0	None
TSOP (Pb-free)	323	9	2.79%	Lifted Ball (See Note 1)
TSOP- Reverse (Pb-free)	30	0	0	None
TSOP I (Pb-Free)	30	0	0	None
TSOP II (Pb-Free)	1,048	0	0	None
TSSOP (Pb-Free)	210	0	0	None
Grand Total	10,749	9	0.08%	See above

Note:

1) CAR# 201611019- Optimized wirebond parameter

3.3 TEMPERATURE CYCLE TEST (TC)

Differences in thermal expansion coefficients are accentuated by cycling devices through temperature extremes. If the materials do not expand and contract equally, large stresses can develop. The Temperature Cycle test stresses mechanical integrity by exposing a device to alternating temperature extremes. Weakness and thermal expansion mismatches in die interconnections, die attach, and wire bonds are often detected with this accelerated test.

Condition	:	MIL-STD-883D, Method 1010, Condition B, -55°C to 125°C MIL-STD-883D, Method 1010, Condition C, -65°C to 150°C (Refer to Appendix C for derating factor calculation)
Pre-Conditioning	:	5 cycles Temperature Cycle -65/+150, 24 hr Bake 125°C, Moisture loading to qualified MSL level
Duration	:	500 cycles minimum at Condition C, 1000 cycles minimum at Condition B
Failure Mode	:	Parametric shifts and catastrophic failures
Failure Mechanism	:	Wire bond, cracked or lifted die and package failure.

Table 6. Temperature Cycling Failure Rate Summary

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	3,835	0	0	None
FBGA (1.0-1.27)	490	0	0	None
FBGA (1.0-1.27, Pb-free)	1,731	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	2,487	0	0	None
UFBGA (Pb-free)	60	0	0	None
FLIPCHIP BGA (Pb-Free)	1,348	0	0	None
FLIPCHIP CSP (Pb-Free)	2,037	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	119	0	0	None
QFN (Saw Type, Pb-Free)	7,038	0	0	None
QFN (Punch Type, Pb-Free)	30	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	120	0	0	None
DFN, 0.8mm Thickness (Saw Type)	1,178	0	0	None
PDIP (Pb-Free)	778	0	0	None
PLCC (Pb-Free)	30	0	0	None
QSOP (Pb-Free)	90	0	0	None
SOIC (Pb Free)	5,699	15	0.26%	Cut Wedge (See Note 1)
SOJ (Pb-Free)	680	0	0	None
SNC (Pb-Free)	150	0	0	None
SSOP (Pb-Free)	1,708	0	0	None
TQFP (Pb-Free)	3,716	0	0	None
TSOP (Pb-free)	835	0	0	None
TSOP- Reverse (Pb-free)	30	0	0	None
TSOP I (Pb-Free)	237	0	0	None
TSOP II (Pb-Free)	4,371	0	0	None
TSSOP (Pb-Free)	239	0	0	None
Grand Total	39,036	15	0.04%	See above

Note:

1) CAR# 201542012- Optimized wirebond parameter

3.4 HIGH TEMPERATURE STORAGE (HTS)

A high-temperature, non-biased bake test is performed to determine the effect on devices of long-term storage at elevated temperatures without any electrical stresses applied. The devices are baked without bias at either 150°C or 165°C for plastic-packaged devices. The reliability at nominal system ambient temperature is related to the failure rate at elevated temperatures through the Arrhenius equation.

Test : High Temperature Storage (HTS)
Conditions : High temperature non-biased bake
Duration : A minimum of 500 hours tested up to 1000 hours at 150°C
Failure Mode : Parametric shifts and catastrophic failures
Failure Mechanism : Lifted ball bonds due to gross intermetallic growth

Table 7. High Temperature Storage Failure Rate Summary

Package	Sample Size	# Failed	Defects %	Failure Mode
FBGA (0.75-0.8, 0.3mm, Pb-free)	1,365	0	0	None
FBGA (1.0-1.27)	180	0	0	None
FBGA (1.0-1.27, Pb-free)	490	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	682	0	0	None
UFBGA (Pb-free)	237	0	0	None
FLIPCHIP BGA (Pb-Free)	320	0	0	None
FLIPCHIP CSP (Pb-Free)	160	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	209	0	0	None
QFN (Saw Type, Pb-Free)	2,196	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	120	0	0	None
DFN, 0.8mm Thickness (Saw Type)	570	0	0	None
PDIP (Pb-Free)	716	0	0	None
PLCC (Pb-Free)	60	0	0	None
PQFP (Pb-Free)	30	0	0	None
QSOP (Pb-Free)	147	0	0	None
SOIC (Pb Free)	3,420	1	0.03%	Lifted Ball (See Note 1)
SOJ (Pb-Free)	420	0	0	None
SNC (Pb-Free)	149	0	0	None
SSOP (Pb-Free)	460	0	0	None
TQFP (Pb-Free)	1,059	0	0	None
TSOP (Pb-free)	670	0	0	None
TSOP- Reverse (Pb-free)	30	0	0	None
TSOP I (Pb-Free)	330	0	0	None
TSOP II (Pb-Free)	1,687	0	0	None
TSSOP (Pb-Free)	360	0	0	None
Grand Total	16,067	1	0.006%	See above

Note:

1) CAR# 201529021 – Optimized wirebond parameter

APPENDIX A: FAILURE RATE CALCULATION

Thermal Acceleration Factors

Acceleration factors (AF) for thermal stresses (Early Failure Rate, Latent Failure Rate, Data Retention and High Temperature Storage) are calculated from the Arrhenius equation)

$$AF = \exp \left(\frac{E_a}{k} \left(\frac{1}{T_u} - \frac{1}{T_t} \right) \right)$$

where :

E_a = Activation Energy of the defect mechanism

K = Boltzmann's constant = 8.62×10^{-5} eV/Kelvin

T_t is the junction temperature of the device under stress

T_u is the junction temperature of the device at use conditions

While there is no substitute for experimentally determining the activation energy, obtaining this information is very difficult because few devices fail stress tests. In the absence of experimental data, the following literature values are used.

APPENDIX A: FAILURE RATE CALCULATION (cont.)

Temperature-Humidity Acceleration Factors

Cypress estimates acceleration factors for temperature-humidity stresses (Pressure Cooker Test and Highly Accelerated Stress Test) from a model developed by Hallberg and Peck ("Quality and Reliability Engineering International". Vol. 7, 1991).

$$AF = \left(\frac{RH_t}{RH_u} \right)^{-3} \exp \frac{E_a}{k} \left(\left(\frac{1}{T_u} - \frac{1}{T_t} \right) \right)$$

where :

T_u = use environment junction temperature (°K)

T_t = test environment junction temperature (°K)

E_a = failure mechanism activation energy (0.9 for corrosion)

k = Boltzman's Constant (8.62×10^{-5} eV/°Kelvin)

RH_u = use environment relative humidity

RH_t = test environment relative humidity

AF = acceleration factor

The Hallberg and Peck model requires the stress junction temperature and relative humidity as well as the use temperature and relative humidity. To estimate the use relative humidity, we assume that the device room temperature is 35 °C (95 °F) and the room relative humidity is 100%. From any Handbook of Chemistry and Physics, the vapor pressure of water VP (water) at 35 °C is 41.175 mm Hg. If we assume that the device will operate with a junction temperature of 70 °C (VP (water) at 70 °C is 233.7 mm Hg), the junction relative humidity (RHj) is

$$RHj = 100\% \left(\frac{41.175}{233.7} \right) = 17.6\%$$

The operating conditions of the devices are then 70 °C and 17.6% relative humidity.

Our Pressure Cooker Test (PCT) submits the devices to a temperature of 121 °C and 100% relative humidity. Using the Hallberg and Peck model, the acceleration factor for the PCT stress can be calculated:

$$AF = \left(\frac{17.6}{100} \right)^{-3} \exp \frac{0.9}{k} \left(\left(\frac{1}{343} - \frac{1}{394} \right) \right) = 9,433$$

APPENDIX A: FAILURE RATE CALCULATION (cont.)

The acceleration factor for HAST is calculated similarly, except that junction temperature heating effects must be included when estimating the relative humidity at the die surface. Assuming an average junction temperature rise of 5 °C, the relative humidity at the die surface during 130 °C HAST testing can be calculated.

$$VP (130^{\circ}C) = 2026.10 \text{ mm Hg}$$

$$VP (135^{\circ}C) = 2347.26 \text{ mm Hg}$$

$$RH_j = 85\% \left(\frac{2026.10}{2347.26} \right) = 73.4\%$$

$$AF = \left(\frac{17.6}{73.4} \right)^{-3} \exp \frac{0.9}{k} \left(\left(\frac{1}{343} - \frac{1}{408} \right) \right) = 9,261$$

Similarly, for 140 °C HAST testing,

$$VP (140^{\circ}C) = 2710.92 \text{ mm Hg}$$

$$VP (145^{\circ}C) = 3116.76 \text{ mm Hg}$$

$$RH_j = 85\% \left(\frac{2710.92}{3116.76} \right) = 73.9\%$$

$$AF = \left(\frac{17.6}{73.9} \right)^{-3} \exp \frac{0.9}{k} \left(\left(\frac{1}{343} - \frac{1}{418} \right) \right) = 17,433$$



APPENDIX A: FAILURE RATE CALCULATION (cont.)

Failure Rate Calculation

For all but LFR test, Cypress reports the failure rate in terms of ppm. Early life reliability is reported in terms of ppm defective expected during the first year of use under typical use conditions. No upper confidence bound will be used for this estimate. The ppm defective is the ratio of the number of rejects to the number of samples and expressed in ppm.

$$PPM = \left(\frac{\text{Total Rejects}}{\text{Total Samples}} \right) \times 1,000,000$$

Intrinsic, or later life reliability, shall be reported using the exponential model, in terms of FITs, with a 60% upper confidence bound for 0 failures or the demonstrated FIT estimate in the case there are failures.

$$FR (FIT) = \chi^2_{\alpha, 2n+2} / (2 * AF * \text{Device Hours}) * 10^{-9}$$

where:

$\chi^2_{\alpha, 2n+2}$ = Chi square factor for 2n +2 degrees of freedom at 60% confidence level.

n = number of failure.

AF = Thermal Acceleration factor and is calculated per Arrhenius equation assuming a 0.7eV activation energy.

Voltage acceleration factor is not included in failure rate calculation even though voltage acceleration may be used during stress. Typical use conditions shall be considered to be 55°C ambient with a 15°C temperature rise at the junction. Thus, use junction temperature is 70°C.

APPENDIX B: TEMPERATURE CYCLING STRESS MODELS

Two acceleration factor (AF) models are used to model temperature cycle failures. The model proposed by Zelenka [1] and others uses the epoxy molding temperature ($T_{\text{mold}} = 170\text{ }^{\circ}\text{C}$) and the minimum temperature reached during temperature cycling, (T_{min}).

$$AF_{\text{brittle}} = \left(\frac{T_{\text{mold}} - T_{\text{min, stress}}}{T_{\text{mold}} - T_{\text{min, use}}} \right)^m$$

The model constant, m , is experimentally calculated for each failure mechanism. The acceleration factor is labeled 'brittle' because the derivation of this equation assumes brittle fracture mechanics. Basically, the model assumed that cracks advance a little every time the maximum stress is reached. The maximum stress is assumed to be proportional to the difference in temperature between the minimum and maximum stress temperatures. For plastic-encapsulated devices, the stress is minimum during molding, (T_{mold}), and maximum during the lowest temperature reached during temperature cycling, (T_{min}).

The model constant, m , is a function of the failure mechanism.

Thin film cracking	$m = 12$ (Blish and Vaney [2])
Al/Au Intermetallic fractures	$m = 4$
Chip-out (cratering) bond failures	$m = 7$ (Dunn and McPherson [3])

For ductile materials, dislocation movement dominates the fracture mechanics and a different model is used.

The second, and most widely accepted model, uses the difference between the minimum and maximum temperatures during temperature cycle testing (T_{min} and T_{max}) to calculate an acceleration factor.

$$AF_{\text{ductile}} = \left(\frac{T_{\text{max, stress}} - T_{\text{min, stress}}}{T_{\text{max, use}} - T_{\text{min, use}}} \right)^m$$

The model constant, ' m ', is again experimentally calculated for each failure mechanism.

Coffin and Manson [4] developed this model from empirical observations of metal fatigue. In ductile materials, if the applied stress is high enough, dislocations are produced. At the high temperature condition of the temperature cycling stress, dislocations are forced towards one metal surface. At the low temperature, the dislocations try to glide back to their original position, but many cannot because they became entangled with other dislocations. After many cycles, these tangles grow until cracking, and finally failure, occurs. Both minimum and maximum temperatures are important, because both contribute to dislocation movement and entanglement. This model is recommended for any failures involving ductile materials. Model constants for ductile failure follow.

Wirebond breakage	$m = 5.16$ (Cypress experimentation)
Solder Fatigue	$m = 2$ (Blish and Vaney [2])

APPENDIX B: TEMPERATURE CYCLING STRESS MODELS (cont.)

Our commercial devices are specified to operate between 0°C and 70 °C. Using this information, the acceleration factor, AF, between use and Military Condition C stress testing (-65°C to 150°C), for the brittle, thin film cracking failure mechanism and ductile, wire bond breakage failure mechanism can be calculated.

$$\text{AF brittle} = \left(\frac{170 - (-65)}{170 - 0} \right)^{12} = 49$$

$$\text{AF ductile} = \left(\frac{150 - (-65)}{70 - 0} \right)^{5.16} = 327$$

References:

- [1] R.L. Zelenka, IEEE/IRPS, pp. 30-34, 1991
- [2] R.C. Blish and P.R. Vaney, IEEE/IRPS, pp 22-29, 1991
- [3] C.F. Dunn and J.W. McPherson, IEEE/IRPS, pp 252-258, 1990
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APPENDIX C: EQUIVALENCE OF DIFFERENT STRESS TEST CONDITIONS

During stress testing, more than one set of test conditions were used. To account for this difference, stress test hours or cycles at the lower stress condition were derated and then added to the total for the most severe stress test condition.

Dynamic (HTOL)

HTOL (EFR/LFR) test is performed at 150 °C and 125 °C. Using the Arrhenius equation (Appendix A) and an activation energy of 0.7 eV, the derating factor, DF, between 125°C and 150 °C can be calculated.

$$DF \text{ (between 125C and 150C)} = \exp \left(\frac{0.7}{k} \left(\frac{1}{150 + 15 + 273} - \frac{1}{125 + 15 + 273} \right) \right) = 0.326$$

The derating calculation assumes a 15 °C rise due to junction heating.

Temperature Cycling

Two different temperature cycling conditions were used to measure reliability, -65°C to 150°C and -55°C to 125°C. Using the brittle failure mechanism model with $m = 12$, the derating factor between -65°C to 150°C and -55°C to 125°C is calculated.

$$DF = \left(\frac{170 - (-55)}{170 - (-65)} \right)^{12} = 1.685$$

Using the ductile failure mechanism model with $m = 5.16$, the derating factor between -65°C to 150°C and -55°C to 125°C is obtained.

$$DF = \left(\frac{125 - (-55)}{150 - (-65)} \right)^{5.16} = 2.501$$

HAST

The derating factor between two HAST conditions, 140 °C / 85%RH and 130 °C / 85% RH is simply the ratio of the acceleration factors (See Appendix A)

$$DF = \frac{9,261}{17,433} = 0.531$$



Appendix D - RELIABILITY DATA

FROM: 4/4/2015

TO: 4/3/2016

Summary Detail -- EFR Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
LL65												
	MPD	124902	R5A(Rev*A)	CY7C1061G30-10BVXIES	125	1.44	96	96	1923	0		
	MPD	124902	R6(Rev*A)	CY7C1061G30-10BVXIES	125	1.44	96	96	1627	0		
	PSD	133601	R1	CY7C1061G30-10ZXE	125	1.44	96	96	275	0		
	PSD	133601	R1A	CY7C1061G30-10ZXE	125	1.44	96	96	264	0		
	PSD	133601	R2	CY7C1061G30-10ZXE	125	1.44	96	96	107	0		
	PSD	133601	R2A	CY7C1061G30-10ZXE	125	1.44	120	120	560	0		
	PSD	133601	R2B	CY7C1061G30-10ZXE	125	1.44	120	120	556	0		
	PSD	133601	R2F	CY7C1061G30-10BV1XE	125	1.44	120	120	711	0		
	PSD	133601	R3	CY7C1061G30-10BVXIES	125	1.44	96	96	1637	0		
	PSD	133601	R4	CY7C1061G30-10BV1XE	125	1.44	120	120	1091	0		
	PSD	133601	R6_Split 1	CY62167G30-55BVXE	125	1.44	120	120	1094	0		
	PSD	133601	R6_Split 2	CY62167G30-55BVXE	125	1.44	120	120	506	0		
	PSD	133601	R7A	CY7C1061G30-10ZXE	125	1.44	96	96	272	0		
	PSD	133601	R8	CY7C1061G30-10ZXI	125	1.44	96	96	361	0		

PSD	141401	R1	7AP171061AO-**GZTE	125	1.44	96	96	275	0
PSD	141401	R2	7AP171061AO-**GZTE	125	1.44	96	96	107	0
PSD	141401	R3	7AP171061AO-**GZTE	125	1.44	96	96	264	0
PSD	141401	R4	CY7C1061G30-10ZXE	125	1.44	120	120	560	0
PSD	141401	R5	CY7C1061G30-10ZXE	125	1.44	120	120	556	0
PSD	141401	R7	CY7C1061G30-10ZXE	125	1.44	96	96	272	0
PSD	141401	R8	CY7C1061G30-10ZXI	125	1.44	96	96	361	0
PSD	143605	R5	CY7C1061G30-10BV1XE	125	1.44	120	120	761	0
PSD	143605	R6	CY7C1061G30-10BVXIES	125	1.44	96	96	1627	0
PSD	143605	R7	CY7C1061G30-10BV1XE	125	1.44	120	120	1091	0
PSD	143606	R8_Split 1	CY62167G30-55BVXE	125	1.44	120	120	506	0
PSD	143606	R8_Split 2	CY62167G30-55BVXE	125	1.44	120	120	1094	0
MPD	144804	R2	CY62167G30-45BVXI	125	1.44	96	96	692	0
MPD	145003	R1	CY62147GE30-45ZSXIES	125	1.44	96	96	1545	0
MPD	145003	R1D	CY7C1041GE30-10ZSXI	125	1.44	96	96	1549	0
MPD	145003	R1F	CY7C1041G30-10ZSXI	125	1.44	96	96	1549	0
MPD	145003	R1G	CY62147G30-45ZSXI	125	1.44	96	96	1543	0
MPD	145003	R1G	CY62147G30-45ZSXI	125	3	96	96	50	0
PSD	150416	R1	CY7C1041G30-10ZSXE	125	1.44	120	120	3495	0
PSD	150416	R5	CY62147G30-55ZSXIE	125	1.44	96	96	3497	0
PSD	150416	R8	CY7C1041G30-10ZSXIE	125	1.44	120	120	3497	0



PSD	150417	R1	CY7C1041G30-10BAJXE	125	1.44	144	144	849	0
PSD	150417	R2	CY7C1041G30-10BAJXE	125	1.44	96	96	850	0
PSD	150417	R3	CY7C1041G30-10BAJXE	125	1.44	96	96	849	0
PSD	150418	R1	CY62147G30-55BVXE	125	1.44	96	96	849	0
PSD	150418	R2	CY62147G30-55BVXE	125	1.44	96	96	849	0
PSD	150418	R3	CY62147G30-55BVXE	125	1.44	96	96	849	0
PSD	151316	R1	CY7C1041G30-10BAJXE	125	1.44	96	96	850	0
PSD	151316	R2	CY7C1041G30-10BAJXE	125	1.44	120	120	850	0
PSD	151316	R3	CY7C1041G30-10BAJXE	125	1.44	96	96	858	0
MPD	152402	R1	CY7C1370KVE33-167AXI	150	2.5	48	48	1488	0
MPD	152405	R1A	CY62167GE30-45BVXI	125	1.44	96	96	938	0
MPD	152405	R2A	CY7C1061G18-15BV1XI	125	1.44	96	96	889	0
MPD	152405	R4	CY62167G30-45BVXI	125	1.44	96	96	959	0
MPD	152405	R5	CY62167G30-45BVXI	125	1.44	96	96	960	0
MPD	155002	R1	CY62167G30-45BVXI	125	1.44	96	96	1799	0
MPD	155002	R2	CY62147G30-45ZSXI	125	1.44	96	96	1800	0

Summary for Technology: LL65

51 records

Sum

52,361 0

R52

MPD	151905	R2A	CY62167EV30LL-45ZXI	125	1.85	96	96	4207	0
MPD	152801	R1	CY2305CSXA-1H	150	3.8	48	48	800	0



MPD	152801	R2	CY2305CSXA-1H	150	3.8	48	48	799	0
MPD	152801	R3	CY2305CSXA-1H	150	3.8	48	48	800	0

Summary for Technology: R52

4 records

Sum 6,606 0

R9

MPD	153503	R3_Split 1	CY7C1370D-167AXC	150	5.5	48	48	2438	0
MPD	153503	R3_Split 2	CY7C1370D-167AXC	150	5.5	48	48	1162	0
MPD	153503	R4	CY7C1370D-167AXC	150	2.25	48	48	1655	0
MPD	152915	R2	CY7C1370D-167AXC	150	2.25	48	48	1261	0

Summary for Technology: R9

4 records

Sum 6,516 0

R95

MPD	150904	R1	CY62146EV30LL-45ZSXI	150	2.2	48	48	1515	0
MPD	151905	R1	CY62167EV30LL-45ZXI	125	1.85	96	96	5070	0
MPD	151905	R2	CY62167EV30LL-45ZXI	125	1.85	96	96	4947	0
MPD	151905	R2A	CY62167EV30LL-45ZXI	125	1.85	96	96	4207	0

Summary for Technology: R95

4 records

Sum 15,739 0

S4

PSD	151003	R1	CY8C24894-24LTXI	125	5.5	120	120	1497	0
PSD	151005	R1	CY8C24894-24LTXI	125	5.5	96	96	1508	0



PSD	151103	R1_Split 2	CY8C24894-24LTXAT	125	5.5	96	96	884	0
PSD	151313	R4	CY8C24894-24LTXA	150	5.5	96	96	800	0
PSD	151313	R5	CY8C24894-24LTXA	150	5.5	96	96	782	0
PSD	151313	R6	CY8C24894-24LTXA	125	5.5	96	96	800	0
MPD	152915	R3	CY8C21534B-24PVXI	150	5.5	48	48	3020	0

Summary for Technology: S4

7 records

Sum

9,291 0

S8

PSD	144001	R4A	CY8C4245PVA-482ES	150	2.34	48	48	414	0
PSD	144001	R4B_Split 1	CY8C4245PVA-482	150	2.34	48	48	1061	0
PSD	144001	R4B_Split 2	CY8C4245PVA-482	150	2.34	48	48	1248	0
PSD	144001	R4B_Split 3	CY8C4245PVA-482	150	2.34	48	48	234	0
PSD	144001	R5A_Split 1	CY8C4245PVS-482ES	150	2.34	48	48	857	0
PSD	144001	R5A_Split 2	CY8C4245PVS-482ES	150	2.34	48	48	116	0
PSD	144001	R5B_Split 1	CY8C4245PVS-482	150	2.34	48	48	1257	0
PSD	144001	R5B_Split 2	CY8C4245PVS-482	150	2.34	48	48	1488	0
PSD	144001	R6A	CY8C4125PVS-482ES	150	2.34	48	48	863	0
PSD	144001	R6B_Split 1	CY8C4125PVS-482	150	2.34	72	72	1233	0
PSD	144001	R6B_Split 2	CY8C4125PVS-482	150	2.34	48	48	1246	0
PSD	144001	R6B_Split 3	CY8C4125PVS-482	150	2.34	48	48	234	0
PSD	144602	R1_Split 1	CY8C20467-24LQXI	150	2.1	72	72	616	0

PSD	144602	R1_Split 3	CY8C20467-24LQXI	150	2.1	72	274	274	0
PSD	144602	R2_Split 2	CY8CMBR3108-LQXI	150	2.1	72	72	388	0
PSD	144602	R2_Split 3	CY8CMBR3108-LQXI	150	2.1	72	72	388	0
PSD	144602	R2_Split 4	CY8CMBR3108-LQXI	150	2.1	48	48	344	0
PSD	144805	R1	CY8C4247AZI-M485ES	150	6	48	48	50	0
PSD	144909	R1_Split 1	CY8C20446A-24LQXI	150	2.1	48	48	612	0
PSD	144909	R1_Split 2	CY8C20446A-24LQXI	150	2.1	48	48	290	0
PSD	144909	R1_Split 3	CY8C20446A-24LQXI	150	2.1	48	48	614	0
MPD	145002	R1_Split 2	CY27410FLTXI	150	2.07	144	144	544	0
MPD	145002	R1_Split 3	CY27410FLTXI	150	2.07	96	96	420	0
MPD	145002	R1_Split 4	CY27410FLTXI	150	2.07	96	96	520	0
DCD	145202	R2_Split 1	CYPD2103-24LQXIES	150	2.268	48	48	441	0
DCD	145202	R2_Split 2	CYPD2103-24LQXIES	150	2.268	48	48	522	0
DCD	145202	R2_Split 3	CYPD2103-24LQXIES	150	2.268	48	48	573	0
PSD	150301	R1_Split 1	CYONSFN3050A-100AZA	150	2.07	48	48	1139	0
PSD	150301	R1_Split 2	CYONSFN3050A-100AZA	150	2.07	48	48	1161	0
PSD	150301	R1_Split 3	CYONSFN3050A-100AZA	150	2.07	48	48	1039	0
PSD	150301	R2_Split 1	CYONSFN3050A-100AZA	150	2.07	48	48	763	0
PSD	150301	R2_Split 2	CYONSFN3050A-100AZA	150	2.07	48	48	1368	0
PSD	150301	R2_Split 3	CYONSFN3050A-100AZA	150	2.07	48	48	1269	0
PSD	150301	R3_Split 1	CYONSFN3050A-100AZA	150	2.07	48	48	1353	0

PSD	150301	R3_Split 2	CYONSFN3050A-100AZA	150	2.07	48	48	1354	0
PSD	150301	R3_Split 3	CYONSFN3050A-100AZA	150	2.07	48	48	692	0
MPD	150407	R1	CY14V101PS-SF108XIES	150	3.45	48	48	693	0
MPD	150407	R1A	CY14V101PS-SF108XIES	150	3.45	48	48	1339	0
MPD	150407	R2	CY14V101PS-SF108XIES	150	3.45	48	48	891	0
MPD	150904	R2	CY8C20236A-24LKXI	150	2.2	48	48	1252	0
MPD	150904	R2A	CY8C20236A-24LKXI	150	2.2	48	48	617	0
PSD	151008	R1_Split 1	CYTT214032-48LQI36ES	150	2.07	48	48	880	0
PSD	151008	R1_Split 2	CYTT214032-48LQI36ES	150	2.07	48	48	618	0
PSD	151008	R2_Split 1	CYTT214032-48LQI36ES	150	2.07	48	48	780	0
PSD	151008	R2_Split 2	CYTT214032-48LQI36ES	150	2.07	48	48	739	0
PSD	151008	R3_Split 1	CYTT214032-48LQI36ES	150	2.07	48	48	495	0
PSD	151008	R3_Split 2	CYTT214032-48LQI36ES	150	2.07	48	48	495	1
PSD	151008	R3_Split 3	CYTT214032-48LQI36ES	150	2.07	48	48	560	2
PSD	151008	R5_Split 1	CY8C42452AXI-483	150	2.07	48	48	1120	0
PSD	151008	R5_Split 2	CY8C42452AXI-483	150	2.07	48	48	390	0
PSD	151204	R1_Split 1	CY8C4248LQI-BL483ES	125	1.44	96	96	742	0
PSD	151204	R1_Split 2	CY8C4248LQI-BL483ES	125	1.44	96	96	743	0
PSD	151204	R1_Split 3	CY8C4248LQI-BL483ES	125	1.44	96	96	24	0
PSD	151204	R1A	CY8C4248LQI-BL483ES	125	6	96	96	49	0
PSD	151204	R4	CY8C4128LQI-BL483ES	125	2.07	96	96	751	0

SRAM BIST Bit (Functional)
CFOS-51/TTO-859

SRAM BIST Bit (Functional)
CFOS-51/TTO-859

PSD	151204	R4	CY8C4128LQI-BL483ES	125	2.07	192	192	6	0		
PSD	151204	R5	CYBL10573-56LQXIES	125	2.07	96	96	745	0		
PSD	151204	R5	CYBL10573-56LQXIES	125	2.07	192	192	49	0		
PSD	151303	R2_Split 1	CY8CMBR31552-LQXI	150	5.5	48	48	331	0		
PSD	151303	R2_Split 2	CY8CMBR31552-LQXI	150	5.5	48	48	318	0		
PSD	151303	R2_Split 3	CY8CMBR31552-LQXI	150	5.5	48	48	325	0		
PSD	151303	R2_Split 4	CY8CMBR31552-LQXI	150	5.5	48	48	326	0		
PSD	151303	R2_Split 5	CY8CMBR31552-LQXI	150	5.5	48	48	169	0		
PSD	151402	R1_Split 1	CYTMA450EFR-48LQIES	150	2.07	48	920	920	0		
PSD	151402	R1_Split 2	CYTMA450EFR-48LQIES	150	2.07	48	629	628	1	151402-1E1	NVD
PSD	151402	R3_Split 1	CYTMA450EFR-48LQIES	150	2.07	48	710	710	0		
PSD	151402	R3_Split 2	CYTMA450EFR-48LQIES	150	2.07	48	839	839	0		
PSD	151403	R1_Split 1	CY8C42452AXI-483	150	2.07	48	48	1120	0		
PSD	151403	R1_Split 2	CY8C42452AXI-483	150	2.07	48	48	390	0		
PSD	152102	R1_Split 1	8CP2F1001A	150	2.07	48	48	700	0		
PSD	152102	R1_Split 2	8CP2F1001A	150	2.07	48	48	700	0		
PSD	152102	R1_Split 3	8CP2F1001A	150	2.07	48	48	150	0		
PSD	152404	R1	CY8CTMA616AA-12	150	5.75	48	48	855	0		
PSD	152404	R2	CY8CTMA616AA-12	150	5.75	48	48	829	0		
PSD	152404	R3	CY8CTMA616AA-12	150	5.75	48	48	828	0		
PSD	152503	R1	CY8C4246PVI-D412ES	150	2.27	48	48	1550	0		

PSD	152604	R1_Split 1	CYAT81688-128AS88ES	150	2.07	51	1724	1724	0
PSD	152604	R1_Split 2	CYAT81688-128AS88ES	150	2.07	51	1508	1508	0
PSD	152604	R2	CYAT81688-128AS88ES	150	2.07	51	207	207	0
PSD	152604	R2A_Split 1	CYAT81688-128AS88ES	150	2.07	48	1709	1709	0
PSD	152604	R2A_Split 2	CYAT81688-128AS88ES	150	2.07	48	1715	1715	0
PSD	152604	R3_Split 1	CYAT81688-128AS88ES	150	2.07	51	1718	1718	0
PSD	152604	R3_Split 2	CYAT81688-128AS88ES	150	2.07	51	1720	1720	0
PSD	152605	R1A	CYAT81688-100AS71ES	150	2.07	96	60	60	0
PSD	152605	R2_Split 1	CYAT81688-100AS71ES	150	2.07	48	48	1080	0
PSD	152605	R2_Split 2	CYAT81688-100AS71ES	150	2.07	48	48	447	0
MPD	152915	R1_Split 1	CY8CMBR3108-LQXI	150	5.5	48	48	440	0
MPD	152915	R1_Split 2	CY8CMBR3108-LQXI	150	5.5	48	48	440	0
MPD	152915	R1_Split 3	CY8CMBR3108-LQXI	150	5.5	72	72	440	0
MPD	152915	R1_Split 4	CY8CMBR3108-LQXI	150	5.5	48	48	440	0
MPD	152915	R1_Split 5	CY8CMBR3108-LQXI	150	5.5	48	48	440	0
MPD	152915	R1_Split 6	CY8CMBR3108-LQXI	150	5.5	48	48	320	0
MPD	152915	R1_Split 7	CY8CMBR3108-LQXI	150	5.5	48	48	320	0
MPD	152915	R1_Split 8	CY8CMBR3108-LQXI	150	5.5	48	48	173	0
PSD	153201	R1	CY8C4248AZI-L485ES	150	1.2	48	48	47	0
PSD	153201	R1_Split 1	CY8C4248AZI-L485ES	150	2.07	48	48	1415	0
PSD	153201	R1_Split 2	CY8C4248AZI-L485ES	150	2.07	48	48	89	0

PSD	153503	R1_Split 1	CY8CMBR3108-LQXI	150	5.5	48	48	332	0
PSD	153503	R1_Split 2	CY8CMBR3108-LQXI	150	5.5	72	72	494	0
PSD	153503	R1_Split 3	CY8CMBR3108-LQXI	150	5.5	48	48	495	0
PSD	153503	R1_Split 4	CY8CMBR3108-LQXI	150	5.5	48	48	496	0
PSD	153503	R1_Split 5	CY8CMBR3108-LQXI	150	5.5	48	48	492	0
PSD	153503	R1_Split 6	CY8CMBR3108-LQXI	150	5.5	48	48	496	0
PSD	153503	R1_Split 7	CY8CMBR3108-LQXI	150	5.5	48	48	208	0
PSD	153503	R2_Split 1	CY8CMBR3108-LQXI	150	5.5	48	48	272	0
PSD	153503	R2_Split 2	CY8CMBR3108-LQXI	150	5.5	48	48	495	0
PSD	153503	R2_Split 3	CY8CMBR3108-LQXI	150	5.5	48	48	496	0
PSD	153503	R2_Split 4	CY8CMBR3108-LQXI	150	5.5	48	48	495	0
PSD	153503	R2_Split 5	CY8CMBR3108-LQXI	150	5.5	48	48	496	0
PSD	153503	R2_Split 6	CY8CMBR3108-LQXI	150	5.5	48	48	496	0
DCD	153606	R1_Split 1	CY8C4248LQI-BL583ES	125	2.07	96	96	818	0
DCD	153606	R1_Split 2	CY8C4248LQI-BL583ES	125	2.07	96	96	718	0
PSD	154004	R1_Split 1	CY14B104NA-BA45XE	150	3.3	48	48	2182	0
PSD	154004	R1_Split 2	CY14B104NA-BA45XE	150	3.3	48	48	1265	0
PSD	154004	R2_Split 1	CY14B104NA-BA45XE	150	3.3	48	48	2218	0
PSD	154004	R2_Split 2	CY14B104NA-BA45XE	150	3.3	48	48	1228	0
PSD	154004	R3_Split 1	CY14B104NA-BA45XE	150	3.3	48	48	1086	0
PSD	154004	R3_Split 2	CY14B104NA-BA45XE	150	3.3	48	48	2362	0



PSD	153607	R1_Split 1	CY8C4246PVI-D412ES	150	2.27	48	48	1277	0
PSD	153607	R1_Spli 2	CY8C4246PVI-D412ES	150	2.27	48	48	255	0
PSD	154403	R1A_Split 1	CY8C4146AZI-S433ES	150	1.8	48	48	718	0
PSD	154403	R1A_Split 2	CY8C4146AZI-S433ES	150	1.8	48	48	359	0
DCD	154601	R1_Split 1	CYPD4225-40LQXIES	150	2.16	48	48	160	0
DCD	154601	R1_Split 2	CYPD4225-40LQXIES	150	2.16	48	48	160	0
DCD	154601	R1_Split 3	CYPD4225-40LQXIES	150	2.16	48	48	160	0
DCD	154601	R1_Split 4	CYPD4225-40LQXIES	150	2.16	48	48	160	0
DCD	154601	R1_Split 5	CYPD4225-40LQXIES	150	2.16	48	48	639	0
DCD	154601	R1_Split 6	CYPD4225-40LQXIES	150	2.16	48	48	216	0
DCD	154601	R2	CYPD4125-40LQXIES	150	2.16	48	48	634	0
DCD	154601	R3	CYPD4125-40LQXIES	150	2.16	48	48	516	0
DCD	MR152009	R1	CYBL10462-56LQXI	125	2.07	96	96	873	0
DCD	MR152009	R2	CYBL10563-56LQXI	125	2.07	120	120	380	1
									MR152009-2E1/ CAR#201530013
DCD	MR152009	R3	CYBL10561-56LQXI	125	2.07	120	120	308	0

Wire to
wire short

Summary for Technology: S8

133 records

Sum

93,558 5

130nm TI F-RAM

MPD	133505	R6	CY15B102Q-SXE	125	3.6	96	96	3352	0
MPD	150502	R1_Split 1	CY15B104Q-LHXIES	125	3.6	96	96	797	0



MPD	150502	R1_Split 2	CY15B104Q-LHXIES	125	3.6	96	96	2	0
MPD	150502	R1A_Split 1	CY15B104Q-SXIES	125	3.6	96	96	1000	0
MPD	150502	R2	CY15B104Q-SXI	125	3.6	96	96	2998	0
MPD	150502	R2B	CY15B104Q-LHXI	125	3.6	96	96	800	0
MPD	150502	R3_Split A	CY15B104Q-SXI	125	3.6	96	96	2250	0
MPD	150502	R3_Split B	CY15B104Q-SXI	125	3.6	96	96	750	0
MPD	150502	R3B	CY15B104Q-SXI	125	3.6	96	96	542	0
MPD	150502	R4	CY15B104Q-SXI	125	3.6	96	96	1500	0

Summary for Technology:
130nm TI F-RAM

10 records

Sum

13,991 0



Summary Detail -- LFR Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
B53												
	DCD	MR133068	R1	CYRF6936-40LTXC	150	3.8	500	500	77	0		
	DCD	MR141067	R1	CYRF6936-40LTXC	150	3.8	500	500	77	0		
	DCD	MR152020	R1	CYRF6936-40LTXC	150	3.8	500	500	77	0		
Summary for Technology: B53			3	records								
Sum									231	0		
C8												
	PSD	MR134037	R1	CY7C65630-56LFXAT	150	3.8	408	77	77	0		
	PSD	MR151005	R1	CY7C65630-56LFXAT	150	3.8	408	77	77	0		
	PSD	MR152024	R1	CY7C65630-56LFXAT	150	3.8	408	77	77	0		
Summary for Technology: C8			3	records								
Sum									231	0		
C9												
	MPD	150420	R1	CY7C1041DV33-10ZSXI	150	3.77	500	500	187	0		
	MPD	MR151016	R1	CY7C1041DV33-10ZSXI	150	3.77	500	500	76	0		
Summary for Technology: C9			2	records								
Sum									263	0		

LL65

MPD	144504	R1	CY7C1460KVE25-250AXC	150	2.5	500	500	116	0
MPD	145003	R1	CY62147GE30-45ZSXIES	125	1.44	1000	1000	193	0
MPD	145003	R1A	CY62147G30-45ZSXIES	125	1.44	1000	1000	197	0
MPD	145003	R1F	CY7C1041G30-10ZSXI	125	1.44	500	500	198	0
MPD	145003	R1G	CY62147G30-45ZSXI	125	1.44	500	500	191	0
PSD	150416	R1	CY7C1041G30-10ZSXE	125	1.44	1000	1000	80	0
PSD	150416	R2	CY7C1041G30-10ZSXE	125	1.44	1000	1000	80	0
PSD	150416	R3	CY62147G30-55ZSXE	125	1.44	1000	1000	80	0
PSD	150417	R1	CY7C1041G30-10BAJXE	125	1.44	1000	1000	79	0
PSD	150417	R2	CY7C1041G30-10BAJXE	125	1.44	1000	1000	80	0
PSD	150417	R3	CY7C1041G30-10BAJXE	125	1.44	1000	1000	80	0
PSD	150418	R1	CY62147G30-55BVXE	125	1.44	1000	1000	80	0
PSD	150418	R2	CY62147G30-55BVXE	125	1.44	1000	1000	79	0
PSD	150418	R3	CY62147G30-55BVXE	125	1.44	1000	1000	78	0
PSD	151316	R1	CY7C1041G30-10BAJXE	125	1.63	1000	1000	80	0
PSD	151316	R2	CY7C1041G30-10BAJXE	125	1.63	1000	1000	80	0
PSD	151316	R3A	CY7C1041G30-10BAJXE	125	1.63	1000	1000	80	0
MPD	152405	R3	CY7C1061GE30-10BVXI	125	1.44	1000	80	80	0
MPD	152405	R6	CY7C1041G30-10ZSXI	125	1.44	500	198	198	0



MPD	152405	R2B	CY7C1061G18-15BV1XI	125	1.44	1000	78	78	0
MPD	152405	R1A	CY62167GE30-45BVXI	125	1.44	1000	78	78	0

Summary for Technology: LL65 **21** **records**

Sum **2,285** **0**

R52

PSD	152801	R1	CY2305CSXA-1H	150	3.8	408	408	80	0
PSD	152801	R2	CY2305CSXA-1H	150	3.8	408	408	80	0

Summary for Technology: R52 **2** **records**

Sum **160** **0**

R7

PSD	MR133049	R1	CY7C1021CV33-12ZSXE	150	5	500	500	300	0
PSD	MR142051	R1	CY7C1041CV33-10ZSXAT	150	2.3	408	408	77	0
PSD	MR144047	R1	CY7C1041CV33-20ZSXET	150	2.3	408	408	77	0
PSD	MR151054	R1	CY7C1041CV33-20ZSXET	150	2.3	408	408	77	0
PSD	MR152058	R1	CY7C1041CV33-12ZSXET	150	2.3	408	408	77	0

Summary for Technology: R7 **5** **records**

Sum **608** **0**

R9

MPD	MR144016	R1	CY7C1381D-133AXIT	150	2.25	500	500	77	0
MPD	MR151002	R1	CY7C1380D-167AXC	150	2.25	500	500	71	0
MPD	MR152056	R1	CY7C1380D-200AXC	150	2.25	500	77	77	0



MPD	MR153038	R1	CY7C1380D-167AXI	150	2.25	500	64	64	0
MPD	MR153038	R2	CY7C1380D-167AXIT	150	2.25	500	52	52	0

Summary for Technology: R9 **5** **records**

Sum **341** **0**

R95

MPD	152202	R1	CY62157EV30LL-45BVXI	125	1.85	1000	1000	116	0
MPD	152202	R4	CY62167EV30LL-45BXIKK	125	1.85	168	168	116	0
MPD	152202	R5	CY62167EV30LL-45BXIKK	125	1.85	168	168	115	0
PSD	MR141070	R1	CY62147EV30LL-45BVXA	150	2.25	408	408	77	0
PSD	MR142015	R1	CY62137FV30LL-55ZSXET	150	1.85	408	408	77	0
PSD	MR144029	R1	CY62128EV30LL-45ZAXAT	150	0	408	408	76	0
PSD	MR144031	R1	CY62146ELL-45ZSXAT	150	1.85	408	408	77	0
PSD	MR152034	R1	CY62147EV30LL-45BVXA	150	2.25	408	408	77	0

Summary for Technology: R95 **8** **record**

Sum **731** **0**

S4

PSD	151313	R1	CY8C24894-24LTXA	150	5.5	1000	1000	120	0
PSD	151313	R2	CY8C24894-24LTXA	150	5.5	1000	1000	119	0
PSD	151313	R3	CY8C24894-24LTXA	150	5.5	1000	1000	120	0
DCD	MR133070	R1	CY7C64215-56LTXCT	150	5.5	500	500	77	0
DCD	MR134029	R1	CY7C64215-56LTXCT	125	5.5	500	500	77	0

DCD	MR151001	R1	CY7C64215-56LTXC	150	5.5	500	500	77	0
PSD	MR151006	R1	CY8CTMA120-56LFXAT	150	5.5	408	408	77	0
PSD	MR153039	R1	CY7C64215-56LTXT	150	5.5	500	500	77	0

Summary for Technology: S4

8 records

Sum

744 0

S8

PSD	142308	R1	CY8CTMA443-48LQIES2	150	2.07	500	500	116	0
PSD	142308	R2	CY8CTMA443-48LQIES2	150	2.07	500	500	116	0
PSD	144001	R4B	CY8C4245PVA-482	150	2.34	408	408	79	0
PSD	144001	R5A	CY8C4245PVS-482ES	150	2.34	408	408	77	0
PSD	144001	R6A	CY8C4125PVS-482ES	125	2.34	408	408	77	0
PSD	144602	R1	CY8C20467-24LQXI	150	2.1	500	500	116	0
PSD	144602	R2	CY8CMBR3108-LQXI	150	2.1	524	524	116	0
PSD	144805	R1	CY8C4247AZI-M485ES	150	2.07	500	500	116	0
MPD	145002	R1	CY27410FLTXI	125	2.07	1000	1000	129	0
MPD	150407	R1	CY14V101PS-SF108XIES	150	3.45	500	500	179	0
DCD	150703	R1	CYBL10561-56LQXIES	125	2.07	168	168	80	0
DCD	150703	R2	CYBL10563-56LQXI	125	2.07	168	168	80	0
PSD	151008	R1	CYTT214032-48LQI36ES	150	2.07	500	500	116	0
PSD	151008	R2	CYTT214032-48LQI36ES	150	2.07	500	500	120	0
PSD	151008	R4	CY8CMBR31552-LQXI	150	5.5	500	500	120	0

PSD	151008	R5	CY8C42452AXI-483	150	2.07	500	500	120	0
PSD	151303	R2	CY8CMBR31552-LQXI	150	5.5	500	500	120	0
PSD	151204	R1_Split 1	CY8C4248LQI-BL483ES	125	2.07	1000	1000	117	0
PSD	151204	R1_Split 2	CY8C4248LQI-BL483ES	125	2.07	1000	1000	58	0
PSD	151402	R1	CYTMA450EFR-48LQIES	150	2.07	500	500	120	0
PSD	151403	R1	CY8C42452AXI-483	150	2.07	500	500	120	0
PSD	152603	R1A	CYAT81688-128AS88ES	150	2.07	408	408	82	0
PSD	152603	R2	CYAT81688-128AS88ES	150	2.07	408	408	82	0
PSD	152603	R3	CYAT81688-128AS88ES	150	2.07	408	408	82	0
PSD	152604	R4	CYAT81688-100AS71ES	150	2.07	500	500	132	0
PSD	152605	R1A	CYAT81688-100AS71ES	150	2.07	500	500	132	0
PSD	152607	R1	CYAT81688-100AS71ES	150	2.07	500	500	132	0
PSD	153607	R1	CY8C4246PVI-D412ES	150	2.27	500	500	80	0
PSD	153201	R1_Split 1	CY8C4248AZI-L485ES	150	2.07	500	500	107	0
PSD	153201	R1_Split 2	CY8C4248AZI-L485ES	150	2.07	500	500	11	0
PSD	160407	R2	CY8CMBR4013-LQXI	150	5.5	500	500	120	0
DCD	161003	R1	CY8C42452AXI-483	150	2.07	500	500	120	0
CCD	MR124067	R1	CYRF6936-40LTXC	150	3.8	500	500	77	0
PSD	MR134025	R1	CY8CTMA445-48LQIT	150	5	500	500	76	0
PSD	MR141077	R1	CYTMA445-48LQI36AE	150	2.07	500	500	77	0
PSD	MR143014	R1	CYTMA445-48LQI36AE	150	2.07	500	500	77	0



PSD	MR143048	R1	CY8CMBR3155-LQXIT	150	2.07	500	500	74	0
PSD	MR144011	R1	CY8CTMA445-48LQIT	150	2.07	500	500	76	0
PSD	MR144057	R1	CY8CMBR3155-LQXIT	150	2.07	500	500	74	0

Summary for Technology: S8 **39** **records**

Sum **3,903** **0**

130nm TI F-RAM

MPD	150502	R1	CY15B104Q-LHXIES	125	3.6	168	168	116	0
MPD	150502	R1A	CY15B104Q-SXIES	125	3.6	168	168	120	0
MPD	150502	R2	CY15B104Q-SXI	125	3.6	1000	1000	200	0
MPD	150502	R3	CY15B104Q-SXI	125	3.6	1000	1000	200	0
MPD	MR141056	R1	FM25CL64B-GTR	125	3.6	1000	1000	76	0
MPD	MR142031	R1	FM25CL64B-GTR	125	3.6	1000	1000	77	0
MPD	MR151036	R1	FM25CL64B-GTR	125	3.6	1000	1000	76	0
MPD	MR152035	R1	FM25CL64B-GTR	125	3.6	1000	1000	76	0

Summary for Technology: 130nm TI F-RAM **8** **records**

Sum **941** **0**



Summary Detail -- DRET Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
S8												
	MPD	145002	R1	CY27410FLTXI	150	0	1000	1000	83	0		
	MPD	150407	R1A	CY14V101PS-SF108XIES	150	0	1000	1000	71	0		
	PSD	151008	R1	CYTT214032-48LQI36ES	150	0	1000	1000	80	0		
	PSD	151008	R2	CYTT214032-48LQI36ES	150	0	1000	1000	80	0		
	PSD	151008	R5	CY8C42452AXI-483	150	0	516	516	80	0		
	PSD	151204	R1	CY8C4248LQI-BL483ES	150	0	1000	1000	80	0		
	PSD	151204	R2	CY8C4248LQI-BL483ES	150	0	1000	1000	80	0		
	PSD	151204	R3	CY8C4248LQI-BL483	150	0	1000	1000	79	0		
	PSD	151303	R1	CY8CMBR3106S2-LQXI	150	0	516	516	80	0		
	PSD	151402	R2	CYTT214032-56LQI44	175	0	152	152	80	0		
	PSD	151403	R1	CY8C42452AXI-483	150	0	516	516	80	0		
	PSD	152503	R1	CY8C4246PVI-D412ES	150	0	1000	1000	80	0		
	PSD	152605	R2	CYAT81688-100AS71ES	150	0	1000	1000	159	0		
	PSD	153607	R1	CY8C4246PVI-D412ES	150	0	1000	1000	80	0		
	PSD	153607	R2	CY8C4246PVI-D412ES	150	0	1000	1000	80	0		
	PSD	153607	R4	CY8C4246PVI-D412ES	150	0	1000	1000	80	0		
	PSD	155102	R1	CY8C4248LQI-BL483ES	150	0	1000	1000	80	0		

PSD	155102	R2	CY8C4248LQI-BL483ES	150	0	1000	1000	80	0
PSD	155102	R3	CY8C4248LQI-BL483	150	0	1000	1000	79	0
PSD	155102	R4	CY8C4246PVI-D412ES	150	0	1000	1000	80	0
PSD	155102	R5	CY8C4248LQI-BL583ES	150	0	500	500	80	0
PSD	155102	R6	CY8C4246PVI-D412ES	150	0	500	500	80	0
PSD	MR134026	R1	CY8CMBR2010-24LQXI	150	0	1000	1000	79	0
PSD	MR134027	R1	CY8C20436A-24LQXI	150	0	1000	1000	80	0
PSD	MR142042	R1	CY8CTST242-LQI-01T	150	0	1000	1000	80	0

Summary for Technology: S8 **25** **records**

Sum **2,070** **0**

130nm TI F-RAM

MPD	142401	R8	7A15256B08	150	0	1000	1000	80	0
MPD	143701	R1	FM28V202A-TG	125	0	1500	1500	80	0
MPD	144103	R3	FM28V202A-TG	125	0	1500	1500	76	0
MPD	144103	R1	FM28V202A-TG	125	0	1500	1500	75	0
MPD	144103	R2	FM28V202A-TG	125	0	1500	1500	78	0
MPD	144703	R1	7A15256B08	150	0	1000	1000	80	0
MPD	144703	R2	7A15256B08	150	0	1000	1000	80	0
MPD	144703	R3	7A15256B08	150	0	1000	1000	80	0
MPD	150502	R1	CY15B104Q-LHXIES	125	0	1500	1500	80	0
MPD	150502	R2	CY15B104Q-SXI	125	0	1500	1500	79	0



MPD	150502	R2A	CY15B104Q-SXI	125	0	1000	1000	80	0
MPD	150502	R3	CY15B104Q-SXI	125	0	1000	1000	80	0
MPD	150502	R3A	CY15B104Q-SXI	125	0	1000	1000	80	0

Summary for Technology:
130nm TI F-RAM

Sum		13	records					1,028	0
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Summary Detail -- HAST Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS
FBGA (0.75-0.8, 0.3mm, Pb-free)											
BK48MRLZLL	G	150417	R1	CY7C1041G30-10BAJXE	130	5.5	96	85	0		
BK48MRLZLL	G	150417	R2	CY7C1041G30-10BAJXE	130	5.5	96	84	0		
BK48MRLZLL	G	150417	R3	CY7C1041G30-10BAJXE	130	5.5	96	85	0		
BK48MARZLL	RA	151316	R1	CY7C1041G30-10BAJXE	130	3.65	96	85	0		
BK48MARZLL	RA	151316	R2	CY7C1041G30-10BAJXE	130	3.65	96	85	0		
BK48MARZLL	RA	151316	R3A	CY7C1041G30-10BAJXE	130	3.65	96	84	0		
BK24AAAALC	SB	153701	R1	CY14V101QS-BK108XQES	130	3.3	264	25	0		
BK24AAAALC	SB	153701	R2	CY14V101QS-BK108XQES	130	3.3	264	25	0		
BK24AAAALC	SB	153701	R3	CY14V101QS-BK108XQES	130	3.3	264	25	0		
BK48HAGLL	G	154103	R1_Split 1	CY14B104NA-BA45XE	130	3.3	96	40	0		
BK48HAGLL	G	154103	R1_Split 2	CY14B104NA-BA45XE	130	3.3	96	40	0		
BK48HAGLL	G	154103	R2_Split 1	CY14B104NA-BA45XE	130	3.3	96	40	0		
BK48HAGLL	G	154103	R2_Split 2	CY14B104NA-BA45XE	130	3.3	96	40	0		
BK48HAGLL	G	154103	R3_Split 1	CY14B104NA-BA45XE	130	3.3	96	40	0		
BK48HAGLL	G	154103	R3_Split 2	CY14B104NA-BA45XE	130	3.3	96	40	0		
BK60AAAALL	G	154604	R1	CY14B116N-BA25XIES	130	3.3	96	24	0		
BK60AAAALL	G	154604	R1	CY14B116N-BA25XIES	130	3.3	192	24	0		
BK60AAAALL	G	154604	R2A	CY14B116N-BA25XIES	130	3.3	96	25	0		
BK48REALLC	SB	160703	R2	CY14V101LA-BA45XIKK	130	3.7	96	25	0		



BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	130	3.7	96	25	0
BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	130	3.7	264	25	0
BK48REALLC	SB	160703	R2	CY14V101LA-BA45XIKK	130	3.7	264	25	0
BK48RFALLC	SB	160703	R4	CY14B104NA-BA25XIKK	110	3.6	96	27	0
BK121AGAGL	RA	MR123025	R1	CYWB0224ABS-BZXI	130	3.63	96	30	0
BK48NZAAGL	G	MR134002	R1	CY14V101LA-BA45XI	130	5.25	96	30	0
BK48PAALLC	RA	MR141027	R1	CY14V101LA-BA25XIT	130	5.25	96	30	0
BK48PAALL	RA	MR143012	R1	CY14V101LA-BA45XIT	130	5.25	96	25	0
BK48PAALLC	RA	MR151017	R1	CY14V101LA-BA45XIT	130	5.25	96	30	0
BK48DLALL	G	MR151061	R1	CY62177EV30LL-55BAXIT	130	3.6	96	30	0
BK48PAALLC	RA	MR152012	R1	CY14V101LA-BA45XI	130	5.25	96	30	0
BK48DLALL	G	MR152049	R1	CG8208AA	130	3.6	96	30	0
BK48MABALL	G	MR152063	R1	CY7C1011CV33-10BAJXET	130	3.65	96	30	0
BK48PAALLC	RA	MR153003	R1	CY14V101LA-BA25XIT	130	5.25	96	23	0
BK48DLALL	G	MR153011	R1	CY62177EV30LL-55BAXI	130	3.6	96	30	0
BK48PAALLC	RA	MR154015	R1	CY14V101LA-BA45XIT	130	3.3	96	30	0
Summary for Package Family:			35	records					
FBGA (0.75-0.8, 0.3mm, Pb-free)									
Sum								1371	0



FBGA (1.0-1.27, Pb-free)

BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	110	1.95	264	28	0
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	110	1.95	528	28	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	110	1.98	264	28	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	110	1.98	528	27	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	110	1.98	264	25	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	110	1.98	528	25	0
BW165TCLLD	SB	153602	R5	CY7C1514KV18-250BZXC	110	1.98	264	25	0
BW165TCLLD	SB	153602	R5	CY7C1514KV18-250BZXC	110	1.98	528	24	0
BW165VALLD	SB	153605	R1	CY7C1381KV33-100BZXI	110	3.63	264	25	0
BW165CELLC	G	MR153045	R1	CY7C1414LV18-250BZXC	130	1.95	96	30	0

**Summary for Package Family:
FBGA (1.0-1.27, Pb-free)**

Sum

10

records

265 0

VFBGA (0.75-0.8, 0.3mm, Pb-Free)

BZ48ARHLLC	RA	143606	R2	CY7C1069G30-10BVXE	130	3.65	192	75	0
BZ48ARELLC	RA	143606	R4	CY7C1061G30-10BV1XEES	130	3.65	192	80	0
BZ48ARELLC	RA	143606	R5	CY7C1061G30-10BV1XEES	130	3.65	192	82	0
BZ48ARLZLL	G	150418	R1	CY62147G30-55BVXE	130	5.55	96	85	0
BZ48ARLZLL	G	150418	R2	CY62147G30-55BVXE	130	5.55	96	85	0
BZ48ARLZLL	G	150418	R3	CY62147G30-55BVXE	130	5.55	96	85	0
BZ48A	SB	152202	R1	CY62157EV30LL-45BVXI	110	5.5	264	30	0
BZ48A	SB	152202	R2	CY62157EV30LL-45BVXI	110	5.5	264	30	0
BZ48A	SB	152202	R3	CY62157EV30LL-45BVXI	110	5.5	264	30	0



BZ48EDALLC	SB	152202	R4	CY62167EV30LL-45BXIKK	110	5.5	264	30	0
BZ48ARHLLC	RA	152405	R1	CY62167GE18-55BVXI	110	3.65	264	28	0
BZ48ARKLLC	RA	152405	R2	CY7C1061G18-15BV1XI	110	3.65	264	28	0
BZ48ARKLLC	RA	152405	R3	CY7C1061GE30-10BVXI	110	3.65	264	28	0
BZ124AAALC	G	153304	R1	CY8C4248BZI-L489ES	130	5.5	96	26	0
BZ48CEAALL	G	MR121050	R1	CY62136EV30LL-45BVXI	130	3.6	96	30	0
BZ48CFBALL	G	MR151065	R1	CY62157EV30LL-45BVXA	130	5.5	96	29	0
BZ48ZEALEC	RA	MR152032	R1	CY62157EV30LL-45BVXIT	130	5.5	96	30	0
BZ48ZEALEC	RA	MR153025	R1	CY62157EV18LL-55BVXIT	130	5.5	96	30	0
BZ48CFBALL	G	MR153041	R1	CY62157EV30LL-45BVXA	130	5.5	96	30	0
BZ48ZEALEC	RA	MR154006	R1	CY62157EV18LL-55BVXIT	130	5.5	96	30	0

Summary for Package Family:
VFBGA (0.75-0.8, 0.3mm, Pb-Free) 20 records

Sum 901 0

FLIPCHIP BGA (Pb-Free)

FR47AAAAAL	G	153703	R1	8F2F1003B	130	5.5	96	29	0
FR47AAAAAL	G	153703	R2	8F2F1003B	130	5.5	96	29	0
FR47AAAAAL	G	153703	R1A	8F2F1003B	110	5.5	264	30	0
FR47AAAAAL	G	153703	R4	8F2F1003B	110	5.5	264	28	0

Summary for Package Family:
FLIPCHIP BGA (Pb-Free) 4 records

Sum 116 0

FLIPCHIP CSP (Pb-Free)

FN25AAGRCD	G	154802	R1	CY8C4246FNI-D412EST	130	2.27	96	30	0
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FN25AAGRCD	G	154802	R2_Split 1	CY8C4246FNI-D412EST	130	2.27	96	20	0	
FN25AAGRCD	G	154802	R2_Split 2	CY8C4246FNI-D412EST	130	2.27	96	10	0	
Summary for Package Family: FLIPCHIP BGA (Pb-Free)			3	records						
Sum								60	0	
QFN (COL, 0.6mm, Saw Type, Pb-free)										
LG16ABAALL	L	MR151060	R1	CY8C20236A-24LKXAT	130	5.25	96	29	0	
LG16ABAALL	L	MR161002	R1	CY8C20236A-24LKXAT	130	5.25	96	30	0	
LG16AQAAAL	G	MR153008	R1	CG7602AAT	130	5.25	96	30	0	
Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)			3	records						
Sum								89	0	
QFN (Saw Type, Pb-Free)										
LQ16ABARC	G	144602	R2	CY8CMBR3108-LQXI	130	5.5	96	25	0	
LQ48AGAALC	RA	151008	R1	CYTT214032-48LQI36ES	130	5.5	96	30	0	
LQ48AGAALC	RA	151008	R2	CYTT214032-48LQI36ES	130	5.5	96	30	0	
LQ56AAAALC	RA	151203	R4	CYBL10562-56LQXI	130	5.5	96	25	0	
LQ56AAAALC	RA	151203	R5	CYBL10462-56LQXI	130	5.5	96	25	0	
LQ56AAAALC	RA	151203	R6	CYBL10563-56LQXIES	130	5.5	96	25	0	
LQ56AAAALC	RA	151203	R1	CY8C4248LQI-BL483ES	130	5.5	96	26	0	
LT40ABAALC	G	151307	R1	CYRF6936-40LTXC	130	3.63	96	25	0	
LT40ABAALC	G	151307	R2	CYRF6936-40LTXC	130	3.63	96	25	0	
LT40ABAALC	G	151307	R3	CYRF6936-40LTXC	130	3.63	96	25	0	
LT56BVAAAL	G	151313	R1	CY8C24894-24LTXA	130	5.25	96	80	0	



LT56BVAAAL	G	151313	R2	CY8C24894-24LTXA	130	5.25	96	78	0
LT56BVAAAL	G	151313	R3	CY8C24894-24LTXA	130	5.25	96	75	0
LQ48AGAALC	RA	151402	R1	CYTMA450EFR-48LQIES	130	5.5	96	30	0
LT48EQAAAL	G	152902	R2	CYWUSB6953-48LTXC	130	3.63	96	25	0
LT48DDBARC	G	152903	R1	CY27410FLTXI	130	2.07	96	25	0
LQ16ABARC	G	152915	R1	CY8CMBR3108-LQXI	130	5.5	96	30	0
LQ16AAAALC	RA	153503	R1	CY8CMBR3108-LQXI	130	5.5	96	29	0
LT88BBAPRC	UT	154702	R1	CS8481AA	130	3.63	96	28	0
LQ48AGAALC	RA	155108	R1	CYTMA445A-48LQI36ZZ	130	5	96	30	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	130	5	96	30	0
LQ48AGAALC	RA	155108	R2	CYTMA445A-48LQI36ZZ	130	5	96	30	0
LT88ABAAAL	L	MR124017	R1	CY8CTMA884LTI-13	130	5.5	96	30	0
LQ36ABAAAL	RA	MR131013	R1	CG7566AFT	130	5.5	96	30	0
LT88ABAAAL	L	MR134040	R1	CY8C3MFIDOCK-187	130	5.5	96	27	0
LT40ABAALC	G	MR141020	R1	CG7380AM	130	3.63	96	30	0
LT48AQAALC	G	MR141052	R1	CY8C20636A-24LTXI	130	5.25	96	29	0
LQ48AGAALC	RA	MR151008	R1	CYTMA445A-48LQI36ZZT	130	5.5	96	30	0
LT32BAABGL	RA	MR152002	R1	CG7558AAT	130	5.25	96	30	0
LQ48AGAALC	RA	MR152003	R1	CG8364AM	130	5.5	96	30	0
LQ16ABARC	G	MR152008	R1	CY8CMBR3108-LQXIT	130	5.5	96	30	0
LQ56AAAALC	RA	MR152009	R4	CYBL10563-56LQXI	130	5.5	96	30	0
LQ16ABBALC	UT	MR152011	R1	CG8356AAT	130	5.5	96	30	0
LT32BAABGL	RA	MR153010	R1	CG7272AAT	130	5.25	96	30	0



LT56YAAALC	G	MR153026	R1	CG7786AAT	130	3.63	96	30	0
LQ16ABBALC	UT	MR153034	R1	CY8C4014LQI-421T	130	5.5	96	25	0
Summary for Package Family: QFN (Saw Type, Pb-Free)			36	records					
Sum								1162	0

QFN (Punch Type,Pb-Free)

LY24BGAGL	L	MR132008	R1	CY8C21323-24LFXI	130	5.25	96	30	0
LY56DGAGL	L	MR161004	R1	CY8CTMA120-56LFXAT	130	5.25	96	29	0
Summary for Package Family: QFN (Punch Type, Pb-Free)			2	records					
Sum								59	0

QFN (Punch Type, Wettable Flank, Pb-Free)

LW56DGAZGL	L	MR151034	R1	CP7598ATT	130	5.25	96	30	0
LW56DGAZGL	L	MR152037	R1	CP7598ATT	130	5.25	96	30	0
LW56DGAZGL	L	MR153021	R1	CP7598ATT	130	5.25	96	30	0
LW56DGAZGL	L	MR154004	R1	CP7598ATT	130	5.25	96	30	0
LW56DGAZGL	L	MR161005	R1	CP7598ATT	130	5.25	96	30	0
Summary for Package Family: QFN (Punch Type, Wettable Flank, Pb-Free)			5	records					
Sum								150	0

DFN (0.8mm Thickness, Saw Type)

LH08DBAALC	UT	150502	R1	CY15B104Q-LHXIES	130	3.6	96	28	0
LH08DBAALC	UT	150502	R1	CY15B104Q-LHXIES	130	3.6	128	28	0
LH08DAAALL	UT	MR141057	R1	FM25H20-DGTR	130	3.6	96	25	0



LH08DAAALL	UT	MR142035	R1	FM25H20-DGTR	130	3.6	96	30	0
LH08DAAALL	UT	MR143025	R1	FM25H20-DGTR	130	3.6	96	30	0
LH08DAAALL	UT	MR144038	R1	FM25H20-DGTR	130	3.6	96	30	0
LH08ABAALL	UT	MR151049	R1	FM25L16B-DGTR	130	3.6	96	30	0
LH08ABAALL	UT	MR153018	R1	FM25L16B-DGTR	130	3.6	96	29	0
LH08ABAALL	UT	MR153035	R1	FM25L16B-DGTR	130	3.6	96	30	0

**Summary for Package Family:
DFN, 0.8mm Thickness (Saw Type)**

Sum **9** **records** **260** **0**

PLCC (Pb-Free)

JZ52SFGAN	M	MR121054	R1	CY7C131-55JXC	130	5.5	96	30	0
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Summary for Package Family: PLCC (Pb-Free)

Sum **1** **record** **30** **0**

PDIP (Pb-Free)

PZ283AAARC	LP	151901	R1	CY8C29466-24PXI	130	5.25	96	25	0
PZ283AAARC	LP	151901	R2	CY8C27443-24PXI	130	5.25	96	25	0
PZ283AAARC	LP	151901	R3	CY8C24423A-24PXI	130	5.25	96	25	0
PZ283AAARC	LP	151901	R4	CY8C29466-24PXI	130	5.25	96	25	0
PZ283AAARC	LP	151901	R5	CY8C27443-24PXI	130	5.25	96	25	0
PZ283AAARC	LP	151901	R6	CY8C24423A-24PXI	130	5.25	96	25	0
PZ183DPGNC	RA	MR151051	R1	CY7C63813-PXC	130	5.5	96	30	0
PZ28BDAALL	LP	MR151025	R1	FM1608B-PG	130	5.5	96	30	0
PZ183DPGNC	RA	MR152007	R1	CY7C63813-PXC	130	5.5	96	27	0



PZ183DPGNC	RA	MR153006	R1	CS6632AF	130	5.5	96	30	0
Summary for Package Family: PDIP (Pb-Free)			10	records					
Sum								267	0
QSOP (Pb-Free)									
SQ2414ACGN	JT	MR121036	R1	CY7C63823-QXC	130	5.5	96	30	0
SQ2414ACGN	JT	MR151027	R1	CY7C63823-QXC	130	5.5	96	30	0
SQ2414ACGN	JT	MR153031	R1	CY7C63823-QXC	130	5.5	96	30	0
Summary for Package Family: QSOP (Pb-Free)			3	records					
Sum								90	0
SOIC (Pb Free)									
SZ815PBAAN	RA	150403	R1_Split 2	CY15B256Q-SXA	130	3.6	96	19	0
SZ815PBAAN	RA	150403	R2_Split 1	CY15B256J-SXA	130	3.6	96	60	0
SZ815PBAAN	RA	150403	R2_Split 2	CY15B256J-SXA	130	3.6	96	20	0
SZ815PBAAN	RA	150403	R3_Split 1	CY15B256Q-SXA	130	3.6	96	60	0
SZ815PBAAN	RA	150403	R3_Split 2	CY15B256Q-SXA	130	3.6	96	20	0
SZ815PBAAN	RA	150403	R4_Split 1	CY15B256Q-SXA	130	3.6	96	60	0
SZ815PBAAN	RA	150403	R4_Split 2	CY15B256Q-SXA	130	3.6	96	17	0
SZ324AALSC	JT	150411	R1	CY62148G-45SXIES	130	5.5	96	25	0
SZ820AAGLC	UT	150502	R2	CY15B104Q-SXI	130	3.6	96	28	0
SZ820AAGLC	UT	150502	R2	CY15B104Q-SXI	130	3.6	128	28	0
SZ820AAGLC	UT	150502	R3	CY15B104Q-SXI	130	3.6	96	28	0
SZ820AAGLC	UT	150502	R3	CY15B104Q-SXI	130	3.6	128	28	0
SZ1615IALC	UT	152303	R1	CYPD1132-16SXQ	130	6.0	96	25	0



SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	130	3.3	96	25	0
SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	130	3.3	192	25	0
SZ815CGAAS	M	152801	R1	CY2305CSXA-1H	130	3.63	96	80	0
SZ815CGAAS	M	152801	R2	CY2305CSXA-1H	130	3.63	96	80	0
SZ815CGAAS	M	152801	R3	CY2305CSXA-1H	130	3.63	96	80	0
SZ815CGAAS	M	152801	R4	CY2305CSXA-1H	130	3.63	96	80	0
SZ815CGAAS	M	152801	R5	CY2305CSXA-1H	130	3.63	96	80	0
SZ815CGAAS	M	152801	R6	CY2305CSXA-1H	130	3.63	96	80	0
SZ163AAALC	RA	154002	R5	CY14B101Q3A-SFXI	130	3.3	96	25	0
SZ163AAALC	RA	154002	R5	CY14B101Q3A-SFXI	130	3.3	192	25	0
SZ1615DGN	M	MR121048	R2	CY8C21234-24SXI	130	5.25	96	30	0
SZ1615BKGN	RA	MR122001	R1	CY8C21234-24SXI	130	5.25	96	30	0
SZ1615FAL	T	MR124021	R1	CY8C20234-12SXIT	130	5.25	96	30	0
SZ1615LDGN	RA	MR132054	R1	CY7C63801-SXC	130	5.5	96	30	0
SZ1615LDGN	RA	MR134043	R1	CY7C63803-SXCT	130	5.5	96	30	0
SZ815JRALL	UT	MR141036	R1	FM25CL64B-GTR	130	3.6	96	30	0
SW815JRALL	UT	MR141038	R1	FM24CL16B-GTR	130	3.65	96	30	0
SZ815HRALL	LP	MR141043	R1	FM25V01-GTR	130	3.6	96	30	0
SZ28BNRALL	UT	MR141061	R1	FM28V020-SGTR	130	5.5	96	30	0
SZ815HRALL	LP	MR142040	R1	FM25V01-GTR	130	3.6	96	30	0
SZ28BNRALL	UT	MR142046	R1	FM28V020-SGTR	130	5.5	96	30	0
SZ815JRALL	UT	MR142054	R1	FM25CL64B-GTR	130	3.6	96	30	0
SW815JRALL	UT	MR142056	R1	FM24CL16B-GTR	130	3.65	96	30	0



SZ141ARAGL	UT	MR143028	R1	FM31256-GTR	130	5.5	96	30	0
SW815JRALL	UT	MR143026	R1	FM24C16B-GTR	130	3.65	96	30	0
SZ815JRALL	UT	MR143034	R1	FM25CL64B-GATR	130	3.6	96	30	0
SZ28BNRALL	UT	MR143039	R1	FM28V020-SGTR	130	5.5	96	30	0
SW815JRALL	UT	MR144020	R1	FM24C16B-GTR	130	3.65	96	30	0
SZ28BNRALL	UT	MR144033	R1	FM28V020-SGTR	130	5.5	96	30	0
SZ815JRALL	UT	MR144041	R1	FM25CL64B-GTR	130	3.6	96	30	0
SZ815HRALL	LP	MR151024	R1	FM25V01-GTR	130	3.6	96	30	0
SZ815JRALL	UT	MR151030	R1	FM25CL64B-GTR	130	3.6	96	30	0
SZ28BNRALL	UT	MR151032	R1	FM28V020-SGTR	130	5.5	96	30	0
SZ815CGAAS	M	MR151035	R1	CY2305CSXA-1HT	130	3.63	96	30	0
SW815JRALL	UT	MR151038	R1	FM24CL16B-GTR	130	3.65	96	30	0
SW815JRALL	UT	MR151040	R1	FM25C160B-GATR	130	5.5	96	30	0
SZ32451LLC	JT	MR151046	R1	CY62148ELL-55SXI	130	3.6	96	40	0
SZ32451LLC	JT	MR151046	R2	CY62148ELL-55SXI	130	3.6	96	40	0
SZ32451LLC	JT	MR151046	R3	CY62148ELL-55SXI	130	3.6	96	40	0
SZ183CPANC	RA	MR152010	R1	CY7C63813-SXC	130	5.5	96	30	0
SW815JRALL	UT	MR152014	R1	FM25C160B-GATR	130	5.5	96	30	0
SZ815JRALL	UT	MR152016	R2	FM25CL64B-GTR	130	3.65	96	30	0
SW815JRALL	UT	MR152017	R1	FM24CL16B-GTR	130	3.65	96	30	0
SZ815CGAAS	M	MR152026	R1	CY2305CSXA-1HT	130	3.63	96	30	0
SZ815HRALL	LP	MR152029	R1	FM25V01-GTR	130	3.6	96	30	0
SZ1615GAAL	T	MR152038	R1	CY8C20055-24SXIT	130	5.25	96	30	0



SZ28BNRALL	UT	MR152047	R1	FM28V020-SGTR	130	5.5	96	30	0
SZ28BNRALL	UT	MR153015	R1	FM28V020-SGTR	130	6	96	30	0
SZ815JRALL	UT	MR153017	R1	FM25CL64B-GATR	130	3.6	96	30	0
SW815JRALL	UT	MR153019	R1	FM24CL16B-GTR	130	3.65	96	30	0
SW815JRALL	UT	MR153020	R1	FM25C160B-GATR	130	5.5	96	30	0
SZ815CGAAS	M	MR153022	R1	CY2305CSXA-1HT	130	3.63	96	30	0
SZ183CPANC	RA	MR153027	R1	CY7C63813-SXC	130	5.5	96	30	0
SZ1615GAAL	T	MR153051	R1	CY8C20055-24SXIT	130	5.25	96	30	0
SZ815CGAAS	M	MR154005	R1	CY2305CSXA-1HT	130	3.63	96	29	0
SZ815CGAAS	M	MR161001	R1	CY2305CSXA-1HT	130	3.63	96	30	0

Summary for Package Family: SOIC (Pb Free) 69 records

Sum 2407 0

VZ44ADALSC	JT	150411	R2	CY7C1041GE30-10VXI	130	5.5	96	25	0
VZ364AALSC	JT	150411	R3	CY7S1049GE30-10VXI	130	5.5	96	25	0
VZ444ACCLN	JT	MR124002	R1	CY7C1021D-10VXIT	130	5.25	96	30	0
VZ32314CLL	JT	MR144053	R1	CY7C1018DV33-10VXIT	130	3.77	96	30	0
VZ444ADLNC	JT	MR151048	R1	CY7C1041D-10VXI	130	2.45	96	40	0
VZ444ADLNC	JT	MR151048	R2	CY7C1041D-10VXI	130	5.5	96	40	0
VZ32314LLC	JT	MR151048	R3	CY7C1018DV33-10VXI	130	3.73	96	45	0
VZ32314LLC	JT	MR151048	R4	CY7C1018DV33-10VXI	130	2.45	96	45	0
VZ32314CLL	JT	MR151057	R1	CY7C1018DV33-10VXIT	130	3.77	96	30	0

Summary for Package Family: SOJ (Pb-Free) 9 records

Sum 310 0



SNC (Pb-Free)

SY2831BHN	JT	MR151059	R1	CG7261ATT	130	5.5	96	30	0
SY2831BCLN	JT	MR152033	R1	CY62256VNULL-70SNXIT	130	5.5	96	29	0
SY2831BHN	JT	MR153044	R1	CY62256NLL-55SNXET	130	5.5	96	30	0
SY2831BHN	JT	MR154013	R1	CY62256NLL-55SNXET	130	5.5	96	30	0

Summary for Package Family: SNC (Pb-Free) 4 records

Sum 119 0

SSOP (Pb-Free)

SP282BAAAL	RA	144001	R1	CY8C4245PVS-482ES	130	5.5	128	77	0
SP282BAAAL	RA	144001	R2	CY8C4245PVS-482ES	130	5.5	128	76	0
SP282BAAAL	RA	144001	R3	CY8C4245PVS-482ES	130	5.5	128	77	0
SP563DBCGN	JT	MR144055	R1	CY7C68013A-56PVXCT	130	3.63	96	30	0
SP2024CAGL	M	MR151033	R1	CY8C21334-24PVXAT	130	5.25	96	30	0
SP563DBGNC	JT	MR151044	R1	CY7C66113C-PVXC	130	5.5	96	45	0
SP483ABANC	JT	MR151044	R2	CY7C63413C-PVXC	130	5.5	96	44	0
SP483ABANC	JT	MR151044	R3	CY7C63413C-PVXC	130	5.5	96	44	0
SP483JABLL	JT	MR152028	R1	CY8C21645-12PVXET	130	5.25	96	30	0
SP282ABGNC	RA	MR152030	R1	CY7C64215-28PVXCT	130	5.25	96	30	0
SP282ABGNC	RA	MR153007	R1	CY7C64215-28PVXCT	130	5.25	96	30	0
SP2024CAGL	M	MR153023	R1	CY8C21334-24PVXAT	130	5.25	96	30	0
SP2822BGL	M	MR154001	R1	CY8C21534-12PVXET	130	5.25	96	30	0

Summary for Package Family: SSOP (Pb-Free) 13 records

Sum 573 0



TQFP (Exposed Pad)

AE32BGAAAS	M	150201	R1	CY2DP1510AXC	130	3.63	192	22	0
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Summary for Package Family: TQFP (Exposed Pad) 1 record

Sum								22	0
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TQFP (Pb-Free)

AZ48CAAASC	JT	145009	R1	CY8C4246AZI-M443ES	130	5.5	96	30	0
AZ44AAAAAS	M	150202	R1	CY8C27543-24AXI	130	5.25	192	20	0
AZ44AAAAAS	M	150202	R2	CY8C27543-24AXI	130	5.25	192	18	0
AZ100RZLLC	G	152402	R1	CY7C1370KVE33-167AXI	130	3.63	96	25	0
AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	130	3.63	96	25	0
AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	130	3.63	192	25	0
AZ128EAZAS	G	152603	R1A	CYAT81688-128AS88ES	130	5.5	96	80	0
AZ128EAZAS	G	152603	R2	CYAT81688-128AS88ES	130	5.5	96	80	0
AZ128EAZAS	G	152603	R3	CYAT81688-128AS88ES	130	5.5	96	79	0
AZ100SJAAL	R	152607	R1	CYAT81688-100AS71ES	130	5.5	96	79	0
AZ100SJAAL	R	152607	R1	CYAT81688-100AS71ES	130	5.5	192	79	0
AZ48BAAASC	T	153305	R1	CY8C4247AZI-L423ES	130	5.5	96	30	0
AZ100RMBLN	R	153503	R3	CY7C1370D-167AXC	130	3.6	96	28	0
AZ100SFEAL	JT	MR123035	R1	CP7529AT	130	5.5	96	29	0
AZ44SGBHAN	JT	MR132017	R1	CY8C22545-24AXI	130	5.25	96	29	0
AZ64EXGAAL	G	MR142005	R1	CP5790DM	130	5.75	96	30	0
AZ64EXGALC	G	MR151010	R1	CY7C53150-20AXI	130	5.75	96	21	0



AZ44ASAGRC	G	MR151011	R1	CY8C22545-24AXI	130	5.25	96	29	0
AZ100RUCLN	JT	MR151064	R2	CG7685AA	130	3.63	96	30	0
AZ100SLAAL	R	MR153042	R1	CY8CTMA1036AS-33	130	5.5	96	34	0
AZ100SHZAL	JT	MR153050	R1	CY8CTMA616AA-22T	130	5.5	96	27	0
AZ44ASHLLC	R	MR154020	R1	CY8C4245AXI-473	130	5.5	96	30	0

Summary for Package Family: TQFP (Pb-Free) 22 records

Sum 857 0

TSOP (Pb-free)

ZT48AVAALC	SB	152916	R1	CY62167EV30LL-45ZXIKK	130	5.5	96	26	0
ZT48AVAALC	SB	152916	R2	CY62167DV30LL-55ZXIKK	130	5.5	96	27	0
ZT48AIALLC	G	MR151062	R1	CY62167ELL-45ZXIT	130	5.5	96	30	0
ZT32RADLNC	RA	MR151063	R1	CY62128ELL-45ZXI	130	3.6	96	30	0
ZT32RAEDLN	RA	MR152005	R1	CY62128EV30LL-45ZXIT	130	3.6	96	30	0
ZT28R2ABGN	JT	MR152040	R1	CY62256NLL-55ZXAT	130	5.5	96	30	0
ZT48AIALLC	G	MR152050	R1	CY62167ELL-45ZXIT	130	5.5	96	30	9
ZT32RBBALL	T	MR152062	R1	CG8339AAT	130	5.5	96	30	0
ZT48AIALLC	G	MR153046	R1	CY62167EV30LL-45ZXI	130	5.5	96	30	0
ZT32RADLNC	RA	MR154003	R1	CY62128ELL-45ZXIT	130	3.6	96	30	0
ZT32RBBALL	T	MR154008	R1	CY62128ELL-45ZXA	130	3.6	96	30	0

Summary for Package Family: TSOP (Pb-free) 11 records

Sum 323 9

MR152050-1A1 Lifted Ball/
CAR#201611019



TSOP- Reverse (Pb-free)

ZY28R2CLN	JT	MR154016	R2	CY62256NLL-70ZRXI	130	5.5	96	30	0
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Summary for Package Family:			1	record					
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TSOP- Reverse (Pb-free)									
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Sum								30	0
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TSOP I (Pb-Free)

ZB32RHABLN	JT	MR153040	R1	CY62138FV30LL-45ZAXAT	130	3.6	96	30	0
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Summary for Package Family: TSOP I (Pb-Free)			1	record					
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Sum								30	0
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TSOP II (Pb-Free)

ZW44AAYAGL	RA	143701	R11	CY15B101N-ZS60XA	130	3.6	96	77	0
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ZW44AAYAGL	RA	143701	R11	CY15B101N-ZS60XA	130	3.6	128	77	0
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ZW44AXYLNC	RA	150409	R2	CY62147GE30-45ZSXIES	130	5.5	96	25	0
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ZW44AWALSC	JT	150410	R1	CY7S1041G30-10ZSXIES	130	5.5	96	25	0
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ZW32AAALRC	T	150412	R1	CY62148G-45ZSXIES	130	5.5	96	25	0
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ZW44AWAZLN	JT	150416	R1	CY7C1041G30-10ZSXE	130	5.5	96	84	0
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ZW44AWAZLN	JT	150416	R2	CY7C1041G30-10ZSXE	130	5.5	96	84	0
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ZW44AWAZLN	JT	150416	R3	CY62147G30-55ZSXE	130	5.5	96	85	0
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ZW44AAELLC	RA	154102	R1	CY62158H-45ZSXIES	130	3.65	96	25	0
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ZW54ARALRC	G	154908	R1	CY7C1061G30-10ZSXI	130	3.65	96	25	0
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ZW54ARALRC	G	154908	R1	CY7C1061G30-10ZSXI	130	3.65	192	25	0
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ZW444ALLR	G	MR123045	R1	CY7C1051DV33-12ZSXIT	130	3.77	96	30	0
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ZW444AOLN	JT	MR144023	R1	CY62146EV30LL-45ZSXA	130	3.6	96	30	0
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ZW444AMLNC	JT	MR151047	R1	CY62157ELL-45ZSXI	130	5.5	96	45	0
ZW444AMLNC	JT	MR151047	R2	CY62157ELL-45ZSXI	130	5.5	96	45	0
ZW444AMLNC	JT	MR151047	R3	CY62157ELL-45ZSXI	130	5.5	96	45	0
ZW44AYAGLC	RA	MR151056	R1	CY7C1041DV33-10ZSXIT	130	3.65	96	30	0
ZW444AKDLN	JT	MR152039	R1	CY7C1041CV33-12ZSXET	130	3.65	96	29	0
ZW324FBGL	T	MR152052	R1	CY7C1019CV33-10ZXAT	130	3.3	96	27	0
ZW44AYAGLC	RA	MR152054	R1	CY7C1041DV33-10ZSXIT	130	3.65	96	30	0
ZW44AYAGLC	RA	MR153004	R1	CY7C1041DV33-10ZSXI	130	3.65	96	30	0
ZW444ALLR	G	MR153049	R1	CY7C1051DV33-10ZSXI	130	3.77	96	30	0
ZW44AXYAGL	RA	MR154007	R1	CY7C1041LV33-10ZSXIT	130	3.25	96	30	0
ZW444AKDLN	JT	MR154011	R1	CY7C1041CV33-12ZSXET	130	3.65	8	30	0
ZW44ABYGLC	RA	MR161006	R1A	CY62146EV30LL-45ZSXIT	130	3.6	96	30	0
ZW444ALLR	G	MR161015	R1	CY7C1051DV33-10ZSXI	130	3.77	96	30	0

Summary for Package Family: TSOP II (Pb-Free)

26

records

Sum

1048 0

TSSOP (Pb-Free)

ZZ0812BGL	T	MR142029	R1	CY2304NZZXI-1T	130	3.63	96	30	0
ZZ0812BGL	T	MR143038	R1	CY2304NZZXI-1T	130	3.63	96	30	0
ZZ0812BGL	T	MR144037	R1	CY2304NZZXC-1T	130	3.63	96	30	0
ZZ0812BGL	T	MR151028	R1	CY2304NZZXI-1T	130	3.63	96	30	0
ZZ1620GANC	RA	MR152006	R1	CY22392FXI	130	3.63	96	30	0



ZZ0812BGL	T	MR152041	R1	CY2304NZZXI-1T	130	3.63	96	30	0
ZZ1620GBAN	RA	MR153005	R1	CY22394FXCT	130	3.63	96	30	0
Summary for Package Family: TSSOP (Pb-Free)			7	records					
Sum								210	0



Summary Detail -- HTS Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS
FBGA (0.75-0.8, 0.3mm, Pb-free)											
BK48MRLZLL	G	150417	R1	CY7C1041G30-10BAJXE	150	0	1000	85	0		
BK48MARZLL	RA	151316	R1	CY7C1041G30-10BAJXE	150	0	1000	85	0		
BK24AAAALC	SB	153701	R4	CY14V101QS-BK108XQES	150	0	500	78	0		
BK24AAAALC	SB	153701	R4	CY14V101QS-BK108XQES	150	0	1000	78	0		
BK60AAAALL	G	154604	R1	CY14B116N-BA25XIES	150	0	500	80	0		
BK60AAAALL	G	154604	R1	CY14B116N-BA25XIES	150	0	1000	80	0		
BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	150	0	500	80	0		
BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	150	0	1000	80	0		
BK48PAALL	RA	MR143012	R1	CY14V101LA-BA45XIT	150	0	1000	30	0		
BK48NZAGLC	G	MR143049	R1	CY14B101LA-BA45XI	150	0	1000	30	0		
BK48NZAGLC	G	MR144005	R1	CY14B101LA-BA45XI	150	0	1000	30	0		
BK48PAALLC	RA	MR151017	R1	CY14V101LA-BA45XIT	150	0	500	30	0		
BK48PAALLC	RA	MR151017	R1	CY14V101LA-BA45XIT	150	0	1000	30	0		
BK48DLALL	G	MR151061	R1	CY62177EV30LL-55BAXIT	150	0	500	30	0		
BK48DLALL	G	MR151061	R1	CY62177EV30LL-55BAXIT	150	0	1000	30	0		
BK48PAALLC	RA	MR152012	R1	CY14V101LA-BA45XI	150	0	500	30	0		
BK48PAALLC	RA	MR152012	R1	CY14V101LA-BA45XI	150	0	1000	30	0		
BK48DLALL	G	MR152049	R1	CG8208AA	150	0	500	30	0		



BK48DLALL	G	MR152049	R1	CG8208AA	150	0	1000	30	0
BK48MABALL	G	MR152063	R1	CY7C1011CV33-10BAJXET	150	0	1000	30	0
BK48PAALLC	RA	MR153003	R1	CY14V101LA-BA25XIT	150	0	500	30	0
BK48PAALLC	RA	MR153003	R1	CY14V101LA-BA25XIT	150	0	1000	30	0
BK48DLALL	G	MR153011	R1	CY62177EV30LL-55BAXI	150	0	500	30	0
BK48DLALL	G	MR153011	R1	CY62177EV30LL-55BAXI	150	0	1000	30	0
BK48CDGLL	G	MR153043	R1	CY7C1041CV33-10BAXET	150	0	1000	30	0
BK48HAGLL	G	MR153052	R1	CY14B104NA-BA20XIT	150	0	500	30	0
BK48HAGLL	G	MR153052	R1	CY14B104NA-BA20XIT	150	0	1000	30	0
BK48DLALL	G	MR154002	R1	CY62177EV30LL-55BAXIT	150	0	500	30	0
BK48DLALL	G	MR154002	R1	CY62177EV30LL-55BAXIT	150	0	1000	30	0
BK48MABALL	G	MR154009	R1	CY7C1011CV33-10BAJXET	150	0	1000	29	0
BK48PAALLC	RA	MR154015	R1	CY14V101LA-BA45XIT	150	0	500	30	0
BK48PAALLC	RA	MR154015	R1	CY14V101LA-BA45XIT	150	0	1000	30	0

**Summary for Package Family: FBGA
(0.75-0.8, 0.3mm, Pb-free)**

32 records

Sum

1365 0

FBGA (1.0-1.27)

BB165BWALE	G	MR152022	R1	CY7C1520KV18-250BZC	150	0	500	30	0
BB165BWALE	G	MR152022	R1	CY7C1520KV18-250BZC	150	0	1000	30	0
BB165CWALE	G	MR153047	R1	CY7C1312KV18-333BZC	150	0	500	30	0
BB165CWALE	G	MR153047	R1	CY7C1312KV18-333BZC	150	0	1000	30	0
BB165BULEC	G	MR154010	R1	CY7C1518KV18-250BZI	150	0	500	30	0



BB165BULEC	G	MR154010	R1	CY7C1518KV18-250BZI	150	0	1000	30	0
Summary for Package Family: FBGA (1.0-1.27)			6	records					
Sum								180	0
FBGA (1.0-1.27, Pb-free)									
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	150	0	500	80	0
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	150	0	1000	80	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	150	0	500	80	0
BW165TALLD	SB	153605	R5	CY7C1414KV18-250BZXC	150	0	500	80	0
BW165TALLD	SB	153605	R5	CY7C1414KV18-250BZXC	150	0	1000	80	0
BW165CELLC	G	MR151012	R1	CY7C1414LV18-250BZXC	150	0	1000	30	0
BW165CELLC	G	MR153045	R1	CY7C1414LV18-250BZXC	150	0	500	30	0
BW165CELLC	G	MR153045	R1	CY7C1414LV18-250BZXC	150	0	1000	30	0
Summary for Package Family: FBGA (1.0-1.27, Pb-free)			8	records					
Sum								490	0
VFBGA (0.75-0.8, 0.3mm, Pb-Free)									
BZ48ASFLLC	G	143605	R1	CY7C1061G30-10BV1XE	150	0	2000	79	0
BZ48ARLZLL	G	150418	R1	CY62147G30-55BVXE	150	0	1000	85	0
BZ48A	SB	152202	R1	CY62157EV30LL-45BVXI	150	0	500	77	0
BZ48A	SB	152202	R1	CY62157EV30LL-45BVXI	150	0	1000	75	0
BZ124AAALC	G	153304	R1	CY8C4248BZI-L489ES	150	0	500	78	0
BZ124AAALC	G	153304	R1	CY8C4248BZI-L489ES	150	0	1000	78	0
BZ48ZEALEC	RA	MR144060	R1	CY62157EV18LL-55BVXIT	150	0	1000	30	0



BZ48ZEALEC	RA	MR152032	R1	CY62157EV30LL-45BVXIT	150	0	500	30	0
BZ48ZEALEC	RA	MR152032	R1	CY62157EV30LL-45BVXIT	150	0	1000	30	0
BZ48ZEALEC	RA	MR153025	R1	CY62157EV18LL-55BVXIT	150	0	500	30	0
BZ48ZEALEC	RA	MR153025	R1	CY62157EV18LL-55BVXIT	150	0	1000	30	0
BZ48ZEALEC	RA	MR154006	R1	CY62157EV18LL-55BVXIT	150	0	500	30	0
BZ48ZEALEC	RA	MR154006	R1	CY62157EV18LL-55BVXIT	150	0	1000	30	0
Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)			13	records					
Sum								682	0

UFBGA (Pb-free)

BU70AABALE	AC	MR141062	R1	CYTMA568-70BUI58AD	150	0	1000	29	0
BU70AABALE	AC	MR142063	R1	CYTMA568-70BUI58ADT	150	0	1000	30	0
BU70AAAALE	G	MR143031	R1	CYTMA568-70BUI58ZZT	150	0	1000	30	0
BU70AABALE	AC	MR144045	R1	CYTMA568-70BUI58BB	150	0	500	29	0
BU70AABALE	AC	MR144045	R1	CYTMA568-70BUI58BB	150	0	1000	29	0
BU70AAAALE	G	MR144048	R1	CP8160ATT	150	0	1000	30	0
BU70AAAAALC	G	MR152013	R1	CYTMA568-70BUI58ADT	150	0	500	30	0
BU70AAAAALC	G	MR152013	R1	CYTMA568-70BUI58ADT	150	0	1000	30	0
Summary for Package Family: UFBGA (Pb-free)			8	records					
Sum								237	0



FLIPCHIP BGA (Pb-Free)

FR47AAAAAL	G	153703	R1	8F2F1003B	150	0	500	80	0
FR47AAAAAL	G	153703	R1	8F2F1003B	150	0	1000	80	0
FR47AAAAAL	G	153703	R4	8F2F1003BC	150	0	1000	80	0
FR47AAAAAL	G	153703	R4	8F2F1003BC	150	0	500	80	0

Summary for Package Family: FLIPCHIP BGA (Pb-Free)

4 records

Sum

320 0

FLIPCHIP CSP (Pb-Free)

FN25AAGRCD	G	154802	R1	CY8C4246FNI-D412EST	150	0	500	80	0
FN25AAGRCD	G	154802	R1	CY8C4246FNI-D412EST	150	0	1000	80	0

Summary for Package Family: FLIPCHIP CSP (Pb-Free)

2 records

Sum

160 0

QFN (COL, 0.6mm, Saw Type, Pb-free)

LG16AEAAAL	MB	MR134067	R1	CY8C20236A-24LKXI	150	0	1000	30	0
LG16AEAAAL	MB	MR141059	R1	CY8C20236A-24LKXI	150	0	500	30	0
LG16AEAAAL	MB	MR141059	R1	CY8C20236A-24LKXI	150	0	1000	29	0
LG16AQAAAL	G	MR151018	R1	CG7602AAT	150	0	1000	30	0
LG16ABAALL	L	MR151060	R1	CY8C20236A-24LKXAT	150	0	1000	30	0
LG16AQAAAL	G	MR153008	R1	CG7602AAT	150	0	500	30	0
LG16AQAAAL	G	MR153008	R1	CG7602AAT	150	0	1000	30	0

Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)

7 records

Sum

209 0



QFN (Saw Type, Pb-Free)

LQ16ABARC	G	144602	R2	CY8CMBR3108-LQXI	150	0	500	80	0
LQ16ABARC	G	144602	R2	CY8CMBR3108-LQXI	150	0	1000	80	0
LT48DBBAAL	RA	150304	R1	CY27410FLTXI	150	0	500	83	0
LQ56AAAALC	RA	151203	R4	CYBL10562-56LQXI	150	0	500	25	0
LQ56AAAALC	RA	151203	R4	CYBL10562-56LQXI	150	0	1000	25	0
LQ56AAAALC	RA	151203	R5	CYBL10462-56LQXI	150	0	500	25	0
LQ56AAAALC	RA	151203	R5	CYBL10462-56LQXI	150	0	1000	25	0
LT56BVAAAL	G	151313	R1	CY8C24894-24LTXA	150	0	1000	80	0
LQ48AGAALC	RA	155108	R1	CYTMA445A-48LQI36ZZ	150	0	500	80	0
LQ48AGAALC	RA	155108	R1	CYTMA445A-48LQI36ZZ	150	0	1000	80	0
LQ48AGAALC	RA	155108	R2	CYTMA445A-48LQI36ZZ	150	0	500	80	0
LQ48AGAALC	RA	155108	R2	CYTMA445A-48LQI36ZZ	150	0	1000	80	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	150	0	500	80	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	150	0	1000	80	0
LT88ABAAAL	L	MR134040	R1	CY8C3MFIDOCK-187	150	0	1000	30	0
LT48AQAALC	G	MR141052	R1	CY8C20636A-24LTXI	150	0	500	30	0
LT48AQAALC	G	MR141052	R1	CY8C20636A-24LTXI	150	0	1000	30	0
LQ24AQAALC	G	MR142001	R1	CG7717AM	150	0	500	30	0
LT48AQAALC	G	MR142006	R1	CY8C20636A-24LTXI	150	0	500	28	0
LT48AQAALC	G	MR142006	R1	CY8C20636A-24LTXI	150	0	1000	28	0
LQ48AGAALC	RA	MR151008	R1	CYTMA445A-48LQI36ZZT	150	0	1000	30	0

LT32BAABGL	RA	MR151009	R1	CG7558AAT	150	0	1000	29	0
LQ16ABBALC	UT	MR151013	R1	CG8356AAT	150	0	1000	30	0
LQ16ABARC	G	MR151019	R1	CG8164AAT	150	0	1000	30	0
LQ44AHAARC	G	MR151045	R1	CYTMA445A5-44LQI28AB	150	0	500	30	0
LQ44AHAARC	G	MR151045	R1	CYTMA445A5-44LQI28AB	150	0	1000	30	0
LQ40AAAALC	RA	MR152001	R1	CY8C4125LQI-483T	150	0	500	30	0
LQ40AAAALC	RA	MR152001	R1	CY8C4125LQI-483T	150	0	1000	30	0
LT32BAABGL	RA	MR152002	R1	CG7558AAT	150	0	500	30	0
LT32BAABGL	RA	MR152002	R1	CG7558AAT	150	0	1000	30	0
LQ48AGAALC	RA	MR152003	R1	CG8364AM	150	0	500	30	0
LQ48AGAALC	RA	MR152003	R1	CG8364AM	150	0	1000	30	0
LQ16ABARC	G	MR152008	R1	CY8CMBR3108-LQXIT	150	0	500	30	0
LQ16ABARC	G	MR152008	R1	CY8CMBR3108-LQXIT	150	0	1000	30	0
LQ56AAAALC	RA	MR152009	R4	CYBL10563-56LQXI	150	0	500	80	0
LQ56AAAALC	RA	MR152009	R4	CYBL10563-56LQXI	150	0	1000	80	0
LQ16ABBALC	UT	MR152011	R1	CG8356AAT	150	0	500	30	0
LQ16ABBALC	UT	MR152011	R1	CG8356AAT	150	0	1000	30	0
LT48AQAAAL	G	MR152043	R1	CP7658BT	150	0	500	30	0
LT48AQAAAL	G	MR152043	R1	CP7658BT	150	0	1000	30	0
LT40ABAALC	G	MR152051	R1	CYRF6936-40LTXC	150	0	500	30	0
LT40ABAALC	G	MR152051	R1	CYRF6936-40LTXC	150	0	1000	30	0
LQ40AABALC	RA	MR153009	R1	CY8C4245LQI-483T	150	0	500	30	0
LQ40AABALC	RA	MR153009	R1	CY8C4245LQI-483T	150	0	1000	30	0



LT32BAABGL	RA	MR153010	R1	CG7272AAT	150	0	500	29	0
LT32BAABGL	RA	MR153010	R1	CG7272AAT	150	0	1000	29	0
LT56YAAALC	G	MR153026	R1	CG7786AAT	150	0	500	30	0
LT56YAAALC	G	MR153026	R1	CG7786AAT	150	0	1000	30	0
LQ16ABBALC	UT	MR153034	R1	CY8C4014LQI-421T	150	0	500	30	0
LQ16ABBALC	UT	MR153034	R1	CY8C4014LQI-421T	150	0	1000	30	0
LQ40AABALC	RA	MR154017	R1	CY8C4245LQI-483T	150	0	500	30	0
LQ40AABALC	RA	MR154017	R1	CY8C4245LQI-483T	150	0	1000	30	0
LQ56AAAALC	RA	MR154018	R1	CG8370AM	150	0	500	30	0
LT68GAAALC	G	MR154027	R1	CY8C5868LTI-LP038	150	0	500	30	0

Summary for Package Family:
QFN (Saw Type, Pb-Free)

54 records

Sum

2196 0

QFN (Punch Type, Wettable Flank, Pb-Free)

LW56DGAZGL	L	MR151034	R1	CP7598ATT	150	0	1000	30	0
LW56DGAZGL	L	MR152037	R1	CP7598ATT	150	0	1000	30	0
LW56DGAZGL	L	MR153021	R1	CP7598ATT	150	0	1000	30	0
LW56DGAZGL	L	MR154004	R1	CP7598ATT	150	0	1000	30	0

Summary for Package Family:
QFN (Punch Type, Wettable Flank, Pb-Free)

4 records

Sum

120 0

DFN , 0.8mm Thickness (Saw Type)

LH08DAAALL	UT	MR141057	R1	FM25H20-DGTR	150	0	500	30	0
LH08DAAALL	UT	MR141057	R1	FM25H20-DGTR	150	0	1000	30	0



LH08DAAALL	UT	MR142035	R1	FM25H20-DGTR	150	0	500	30	0
LH08DAAALL	UT	MR142035	R1	FM25H20-DGTR	150	0	1000	30	0
LH08DAAALL	UT	MR143025	R1	FM25H20-DGTR	150	0	500	30	0
LH08DAAALL	UT	MR143025	R1	FM25H20-DGTR	150	0	1000	30	0
LH08DAAALL	UT	MR144038	R1	FM25H20-DGTR	150	0	500	30	0
LH08DAAALL	UT	MR144038	R1	FM25H20-DGTR	150	0	1000	30	0
LH08ABAALL	UT	MR151049	R1	FM25L16B-DGTR	150	0	500	30	0
LH08ABAALL	UT	MR151049	R1	FM25L16B-DGTR	150	0	1000	30	0
LH08ABAALL	UT	MR151058	R1	FM25L16B-DGTR	150	0	500	30	0
LH08ABAALL	UT	MR151058	R1	FM25L16B-DGTR	150	0	1000	30	0
LH08ABAALL	UT	MR152044	R1	FM25L16B-DGTR	150	0	500	30	0
LH08ABAALL	UT	MR152044	R1	FM25L16B-DGTR	150	0	1000	30	0
LH08ABAALL	UT	MR152060	R1	FM25L16B-DGTR	150	0	500	30	0
LH08ABAALL	UT	MR152060	R1	FM25L16B-DGTR	150	0	1000	30	0
LH08ABAALL	UT	MR153018	R1	FM25L16B-DGTR	150	0	500	30	0
LH08ABAALL	UT	MR153018	R1	FM25L16B-DGTR	150	0	1000	30	0
LH08ABAALL	UT	MR153035	R1	FM25L16B-DGTR	150	0	500	30	0

Summary for Package Family:
DFN , 0.8mm Thickness (Saw Type)
Sum

19 records

570 0

PDIP (Pb-Free)

PZ083AAALL	UT	MR141039	R1	FM25V20-PG	150	0	1000	30	0
PZ083AAALL	UT	MR142036	R1	FM25V20-PG	150	0	1000	30	0



PZ083AAALL	UT	MR143027	R1	FM25V20-PG	150	0	1000	30	0
PZ28BDAALL	LP	MR143042	R1	FM1608B-PG	150	0	500	30	0
PZ28BDAALL	LP	MR143042	R1	FM1608B-PG	150	0	1000	30	0
PZ083AAALL	UT	MR144039	R1	FM25V20-PG	150	0	1000	30	0
PZ28BDAALL	LP	MR144054	R1	FM1608B-PG	150	0	500	30	0
PZ28BDAALL	LP	MR144054	R1	FM1608B-PG	150	0	1000	30	0
PZ28BDAALL	LP	MR151025	R1	FM1608B-PG	150	0	500	30	0
PZ28BDAALL	LP	MR151025	R1	FM1608B-PG	150	0	1000	30	0
PZ083AAALL	UT	MR151042	R1	FM25V20-PG	150	0	500	30	0
PZ083AAALL	UT	MR151042	R1	FM25V20-PG	150	0	1000	30	0
PZ183DPGNC	RA	MR151051	R1	CY7C63813-PXC	150	0	500	30	0
PZ183DPGNC	RA	MR151051	R1	CY7C63813-PXC	150	0	1000	30	0
PZ183DPGNC	RA	MR152007	R1	CY7C63813-PXC	150	0	500	28	0
PZ183DPGNC	RA	MR152007	R1	CY7C63813-PXC	150	0	1000	28	0
PZ083AAALL	UT	MR152015	R1	FM25V20-PG	150	0	500	30	0
PZ083AAALL	UT	MR152015	R1	FM25V20-PG	150	0	1000	30	0
PZ083AAALL	UT	MR152055	R1	FM25V20-PG	150	0	500	30	0
PZ083AAALL	UT	MR152055	R1	FM25V20-PG	150	0	1000	30	0
PZ183DPGNC	RA	MR153006	R1	CS6632AF	150	0	500	30	0
PZ183DPGNC	RA	MR153006	R1	CS6632AF	150	0	1000	30	0
PZ083AAALL	UT	MR153013	R1	FM25V20-PG	150	0	500	30	0



PZ083AAALL	UT	MR153013	R1	FM25V20-PG	150	0	1000	30	0
Summary for Package Family: PDIP (Pb-Free)			24	records					
Sum								716	0
PLCC (Pb-Free)									
JZ32RBGAN	M	MR151029	R1	CY7B991V-5JXIT	150	0	500	30	0
JZ32RBGAN	M	MR151029	R1	CY7B991V-5JXIT	150	0	1000	30	0
Summary for Package Family: PLCC (Pb-Free)			2	records					
Sum								60	0
PQFP (Pb-Free)									
NZ52EAALL	M	MR134071	R1	CY7C136AE-55NXI	150	0	1000	30	0
Summary for Package Family: SSOP (Pb-Free)			1	record					
Sum								30	0
QSOP (Pb-Free)									
SQ2414ACGN	JT	MR141044	R1	CY7C63823-QXC	150	0	1000	29	0
SQ2414ACGN	JT	MR151027	R1	CY7C63823-QXC	150	0	500	30	0
SQ2414ACGN	JT	MR151027	R1	CY7C63823-QXC	150	0	1000	28	0
SQ2414ACGN	JT	MR153031	R1	CY7C63823-QXC	150	0	500	30	0
SQ2414ACGN	JT	MR153031	R1	CY7C63823-QXC	150	0	1000	30	0
Summary for Package Family: QSOP (Pb-Free)			5	records					
Sum								147	0
SOIC (Pb Free)									
SZ324AALSC	JT	150411	R1	CY62148G-45SXIES	150	0	500	80	0
SZ324AALSC	JT	150411	R1	CY62148G-45SXIES	150	0	1000	80	0



SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	150	0	500	80	0
SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	150	0	1000	80	0
SZ1615IALC	UT	152303	R1	CYPD1132-16SXQ	150	0	500	80	0
SZ1615IALC	UT	152303	R1	CYPD1132-16SXQ	150	0	1000	80	0
SZ815CGAAS	M	152801	R1	CY2305CSXA-1H	150	0	500	80	0
SZ28ABGAS	AC	MR134004	R1	STK12C68-SF45	150	0	500	30	0
SZ28ABGAS	AC	MR134004	R1	STK12C68-SF45	150	0	1000	30	0
SZ28ABGAS	AC	MR141023	R1	STK12C68-SF45	150	0	500	30	0
SZ28ABGAS	AC	MR141023	R1	STK12C68-SF45	150	0	1000	30	0
SZ141ARAGL	UT	MR141037	R1	FM31256-G1	150	0	500	30	0
SZ141ARAGL	UT	MR141037	R1	FM31256-G1	150	0	1000	30	0
SW815JRALL	UT	MR141038	R1	FM24CL16B-GTR	150	0	500	30	0
SW815JRALL	UT	MR141038	R1	FM24CL16B-GTR	150	0	1000	30	0
SZ28BNRALL	UT	MR141061	R1	FM28V020-SGTR	150	0	1000	30	0
SZ1615FAL	T	MR141068	R1	CY8C20110-SX2I	150	0	1000	30	0
SZ32451BLN	JT	MR141072	R1	CP7935ATT	150	0	1000	30	0
SZ28BNRALL	UT	MR142046	R1	FM28V020-SGTR	150	0	1000	30	0
SZ141ARAGL	UT	MR142055	R1	FM31256-GTR	150	0	500	30	0
SZ141ARAGL	UT	MR142055	R1	FM31256-GTR	150	0	1000	30	0
SW815JRALL	UT	MR142056	R1	FM24CL16B-GTR	150	0	500	30	0
SW815JRALL	UT	MR142056	R1	FM24CL16B-GTR	150	0	1000	30	0
SZ32451BLN	JT	MR143017	R1	CP7896ATT	150	0	1000	30	0
SZ1615FAL	T	MR143018	R1	CY8C20110-SX2I	150	0	1000	30	0



SW815JRALL	UT	MR143026	R1	FM24C16B-GTR	150	0	500	30	0	
SW815JRALL	UT	MR143026	R1	FM24C16B-GTR	150	0	1000	30	0	
SZ141ARAGL	UT	MR143028	R1	FM31256-GTR	150	0	500	30	0	
SZ141ARAGL	UT	MR143028	R1	FM31256-GTR	150	0	1000	30	0	
SZ28BNRALL	UT	MR143039	R1	FM28V020-SGTR	150	0	1000	30	0	
SZ28ABGAS	AC	MR143043	R1	STK12C68-SF45I	150	0	500	29	0	
SZ28ABGAS	AC	MR143043	R1	STK12C68-SF45I	150	0	1000	29	0	
SW815JRALL	UT	MR144020	R1	FM24C16B-GTR	150	0	500	30	0	
SW815JRALL	UT	MR144020	R1	FM24C16B-GTR	150	0	1000	30	0	
SZ28BNRALL	UT	MR144033	R1	FM28V020-SGTR	150	0	1000	30	0	
SZ141ARAGL	UT	MR144040	R1	FM31256-GTR	150	0	500	30	0	
SZ141ARAGL	UT	MR144040	R1	FM31256-GTR	150	0	1000	30	0	
SZ183CPANC	RA	MR151021	R1	CY7C63813-SXC	150	0	1000	30	0	
SZ815HRALL	LP	MR151024	R1	FM25V01-GTR	150	0	1000	30	0	
SZ28ABGAS	AC	MR151026	R1	STK12C68-SF45	150	0	500	30	0	
SZ28ABGAS	AC	MR151026	R1	STK12C68-SF45	150	0	1000	30	0	
SZ815JRALL	UT	MR151030	R1	FM25CL64B-GTR	150	0	1000	30	0	
SZ141ARAGL	UT	MR151031	R1	FM31256-G	150	0	500	30	0	
SZ141ARAGL	UT	MR151031	R1	FM31256-G	150	0	1000	30	0	
SZ28BNRALL	UT	MR151032	R1	FM28V020-SGTR	150	0	1000	30	0	
SZ815CGAAS	M	MR151035	R1	CY2305CSXA-1HT	150	0	1000	30	1	MR151035-1S1
SZ815JRALL	UT	MR151037	R1	FM25CL64B-GTR	150	0	1000	30	0	Lifted Ball CAR#201529021
SW815JRALL	UT	MR151038	R1	FM24CL16B-GTR	150	0	500	30	0	



SW815JRALL	UT	MR151038	R1	FM24CL16B-GTR	150	0	1000	30	0
SZ141ARAGL	UT	MR151039	R1	FM31256-GTR	150	0	500	30	0
SW815JRALL	UT	MR151040	R1	FM25C160B-GATR	150	0	1000	30	0
SZ28BNRALL	UT	MR151041	R1	FM28V020-SGTR	150	0	1000	30	0
SW815JRALL	UT	MR151043	R1	FM24CL64B-GTR	150	0	500	30	0
SW815JRALL	UT	MR151043	R1	FM24CL64B-GTR	150	0	1000	30	0
SZ32451LLC	JT	MR151046	R1	CY62148ELL-55SXI	150	0	500	45	0
SZ32451LLC	JT	MR151046	R2	CY62148ELL-55SXI	150	0	500	45	0
SZ32451LLC	JT	MR151046	R3	CY62148ELL-55SXI	150	0	500	45	0
SZ815HRALL	LP	MR151052	R1	FM25V01-GTR	150	0	500	30	0
SZ815HRALL	LP	MR151052	R1	FM25V01-GTR	150	0	1000	30	0
SZ183CPANC	RA	MR152010	R1	CY7C63813-SXC	150	0	500	30	0
SZ183CPANC	RA	MR152010	R1	CY7C63813-SXC	150	0	1000	30	0
SW815JRALL	UT	MR152014	R1	FM25C160B-GATR	150	0	500	30	0
SW815JRALL	UT	MR152014	R1	FM25C160B-GATR	150	0	1000	30	0
SZ815JRALL	UT	MR152016	R2	FM25CL64B-GTR	150	0	500	30	0
SZ815JRALL	UT	MR152016	R2	FM25CL64B-GTR	150	0	1000	30	0
SW815JRALL	UT	MR152017	R1	FM24CL16B-GTR	150	0	500	30	0
SW815JRALL	UT	MR152017	R1	FM24CL16B-GTR	150	0	1000	30	0
SZ815CGAAS	M	MR152026	R1	CY2305CSXA-1HT	150	0	1000	28	0
SZ815HRALL	LP	MR152029	R1	FM25V01-GTR	150	0	500	30	0
SZ815HRALL	LP	MR152029	R1	FM25V01-GTR	150	0	1000	30	0
SW815JRALL	UT	MR152036	R1	FM25C160B-GATR	150	0	500	30	0



SW815JRALL	UT	MR152036	R1	FM25C160B-GATR	150	0	1000	30	0
SZ1615GAAL	T	MR152038	R1	CY8C20055-24SXIT	150	0	500	30	0
SZ1615GAAL	T	MR152038	R1	CY8C20055-24SXIT	150	0	1000	30	0
SZ815HRALL	LP	MR152042	R1	FM25V01-GTR	150	0	500	30	0
SZ815HRALL	LP	MR152042	R1	FM25V01-GTR	150	0	1000	30	0
SW815JRALL	UT	MR152045	R1	FM24C64B-GTR	150	0	500	30	0
SW815JRALL	UT	MR152045	R1	FM24C64B-GTR	150	0	1000	30	0
SZ28BNRALL	UT	MR152047	R1	FM28V020-SGTR	150	0	500	30	0
SZ28BNRALL	UT	MR152047	R1	FM28V020-SGTR	150	0	1000	30	0
SZ141ARAGL	UT	MR152048	R1	FM31256-GTR	150	0	500	30	0
SZ141ARAGL	UT	MR152048	R1	FM31256-GTR	150	0	1000	30	0
SZ32451BLN	JT	MR152061	R1	CY7C53120E2-10SXI	150	0	500	30	0
SZ32451BLN	JT	MR152061	R1	CY7C53120E2-10SXI	150	0	1000	30	0
SW815JRALL	UT	MR153014	R1	FM24CL64B-GTR	150	0	500	30	0
SW815JRALL	UT	MR153014	R1	FM24CL64B-GTR	150	0	1000	30	0
SZ28BNRALL	UT	MR153015	R1	FM28V020-SGTR	150	0	500	30	0
SZ28BNRALL	UT	MR153015	R1	FM28V020-SGTR	150	0	1000	30	0
SZ141ARAGL	UT	MR153016	R1	FM31256-GTR	150	0	500	30	0
SZ815JRALL	UT	MR153017	R1	FM25CL64B-GATR	150	0	500	30	0
SZ815JRALL	UT	MR153017	R1	FM25CL64B-GATR	150	0	1000	30	0
SW815JRALL	UT	MR153019	R1	FM24CL16B-GTR	150	0	500	30	0
SW815JRALL	UT	MR153019	R1	FM24CL16B-GTR	150	0	1000	30	0
SW815JRALL	UT	MR153020	R1	FM25C160B-GATR	150	0	500	30	0



SW815JRALL	UT	MR153020	R1	FM25C160B-GATR	150	0	1000	30	0
SZ183CPANC	RA	MR153027	R1	CY7C63813-SXC	150	0	500	30	0
SZ183CPANC	RA	MR153027	R1	CY7C63813-SXC	150	0	1000	29	0
SZ1615GAAL	T	MR153051	R1	CY8C20055-24SXIT	150	0	500	30	0
SZ1615GAAL	T	MR153051	R1	CY8C20055-24SXIT	150	0	1000	30	0
SZ820ABASC	UT	MR153053	R1	FM25V20A-G	150	0	500	30	0
SZ820ABASC	UT	MR153053	R1	FM25V20A-G	150	0	1000	30	0

Summary for Package Family: SOIC (Pb Free) 101 records

Sum 3420 1

SOJ (Pb-Free)

VZ32314CLL	JT	MR144053	R1	CY7C1018DV33-10VXIT	150	0	500	30	0
VZ32314CLL	JT	MR144053	R1	CY7C1018DV33-10VXIT	150	0	1000	30	0
VZ444ADLNC	JT	MR151048	R1	CY7C1041D-10VXI	150	0	500	45	0
VZ444ADLNC	JT	MR151048	R2	CY7C1041D-10VXI	150	0	500	45	0
VZ32314LLC	JT	MR151048	R3	CY7C1018DV33-10VXI	150	0	500	45	0
VZ32314LLC	JT	MR151048	R4	CY7C1018DV33-10VXI	150	0	500	45	0
VZ32314CLL	JT	MR151057	R1	CY7C1018DV33-10VXIT	150	0	500	30	0
VZ32314CLL	JT	MR151057	R1	CY7C1018DV33-10VXIT	150	0	1000	30	0
VZ32420DLL	JT	MR152031	R1	CY7C1019DV33-10VXI	150	0	500	30	0
VZ32420DLL	JT	MR152031	R1	CY7C1019DV33-10VXI	150	0	1000	30	0



VZ32420DLL	JT	MR153048	R1	CY7C1019DV33-10VXI	150	0	500	30	0
VZ32420DLL	JT	MR153048	R1	CY7C1019DV33-10VXI	150	0	1000	30	0
Summary for Package Family: SOJ (Pb-Free)		12	records						
Sum								420	0
SNC (Pb-Free)									
SY2831BHN	JT	MR151059	R1	CG7261ATT	150	0	1000	29	0
SY2831BCLN	JT	MR152033	R1	CY62256VNLL-70SNXIT	150	0	500	30	0
SY2831BCLN	JT	MR152033	R1	CY62256VNLL-70SNXIT	150	0	1000	30	0
SY2831BHN	JT	MR153044	R1	CY62256NLL-55SNXET	150	0	1000	30	0
SY2831BHN	JT	MR154013	R1	CY62256NLL-55SNXET	150	0	1000	30	0
Summary for Package Family: SNC (Pb-Free)		5	records						
Sum								149	0
SSOP (Pb-Free)									
SP563DBCNC	JT	MR144055	R1	CY7C68013A-56PVXCT	150	0	1000	28	0
SP282ABGNC	RA	MR151022	R1	CY7C64215-28PVXI	150	0	1000	27	0
SP2024CAGL	M	MR151033	R1	CY8C21334-24PVXAT	150	0	1000	30	0
SP563DBGNC	JT	MR151044	R1	CY7C66113C-PVXC	150	0	500	45	0
SP483ABANC	JT	MR151044	R2	CY7C63413C-PVXC	150	0	500	45	0
SP483ABANC	JT	MR151044	R3	CY7C63413C-PVXC	150	0	500	45	0
SP2822BGL	M	MR152027	R1	CY8C21534-12PVXET	150	0	1000	30	0
SP483JABLL	JT	MR152028	R1	CY8C21645-12PVXET	150	0	1000	30	0
SP282ABGNC	RA	MR152030	R1	CY7C64215-28PVXCT	150	0	500	30	0
SP282ABGNC	RA	MR152030	R1	CY7C64215-28PVXCT	150	0	1000	30	0



SP282ABGNC	RA	MR153007	R1	CY7C64215-28PVXCT	150	0	500	30	0
SP282ABGNC	RA	MR153007	R1	CY7C64215-28PVXCT	150	0	1000	30	0
SP2024CAGL	M	MR153023	R1	CY8C21334-24PVXAT	150	0	1000	30	0
SP2822BGL	M	MR154001	R1	CY8C21534-12PVXET	150	0	1000	30	0
Summary for Package Family: SSOP (Pb-Free)					14	records			
Sum								460	0
TQFP (Pb-Free)									
AZ48CAAASC	JT	145009	R1	CY8C4246AZI-M443ES	150	0	500	78	0
AZ48CAAASC	JT	145009	R1	CY8C4246AZI-M443ES	150	0	1000	78	0
AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	150	0	500	78	0
AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	150	0	1000	78	0
AZ48BAAASC	T	153305	R1	CY8C4247AZI-L423ES	150	0	500	80	0
AZ48BAAASC	T	153305	R1	CY8C4247AZI-L423ES	150	0	1000	80	0
AZ32LXGAN	L	MR141076	R1	CY29946AXIT	150	0	1000	30	0
AZ64EXGAAL	G	MR142005	R1	CP5790DM	150	0	1000	30	0
AZ64JAAALL	M	MR143040	R1	CY7C144E-15AXC	150	0	1000	30	0
AZ32GXGAN	G	MR143052	R1	CY29940AXI	150	0	500	25	0
AZ32GXGAN	G	MR143052	R1	CY29940AXI	150	0	1000	24	0
AZ100RUCLN	JT	MR144059	R1	CY7C1350G-200AXCT	150	0	1000	30	0
AZ64EXGALC	G	MR151010	R1	CY7C53150-20AXI	150	0	500	30	0
AZ64EXGALC	G	MR151010	R1	CY7C53150-20AXI	150	0	1000	30	0
AZ44ASAGRC	G	MR151011	R1	CY8C22545-24AXI	150	0	500	30	0
AZ44ASAGRC	G	MR151011	R1	CY8C22545-24AXI	150	0	1000	30	0



AZ100RUCLN	JT	MR151064	R1	CG7685AA	150	0	500	29	0
AZ100RUCLN	JT	MR151064	R1	CG7685AA	150	0	1000	29	0
AZ44ASHLLC	R	MR152004	R1	CY8C4125AXI-483T	150	0	500	30	0
AZ44ASHLLC	R	MR152004	R1	CY8C4125AXI-483T	150	0	1000	30	0
AZ44ASAGRC	G	MR153012	R1	CY8C22545-24AXI	150	0	500	30	0
AZ44ASAGRC	G	MR153012	R1	CY8C22545-24AXI	150	0	1000	30	0
AZ100SLAAL	R	MR153042	R1	CY8CTMA1036AS-33	150	0	1000	30	0
AZ100SHZAL	JT	MR153050	R1	CY8CTMA616AA-22T	150	0	1000	30	0
AZ44ASHLLC	R	MR154020	R1	CY8C4245AXI-473	150	0	500	30	0
AZ44ASHLLC	R	MR154020	R1	CY8C4245AXI-473	150	0	1000	30	0

Summary for Package Family: TQFP (Pb-Free) 26 records

Sum 1059 0

TSOP (Pb-free)

ZT48AVAALC	SB	152916	R1	CY62167EV30LL-45ZXIKK	150	0	500	80	0
ZT48AVAALC	SB	152916	R1	CY62167EV30LL-45ZXIKK	150	0	1000	80	0
ZT48AIALLC	G	MR151062	R1	CY62167ELL-45ZXIT	150	0	500	30	0
ZT48AIALLC	G	MR151062	R1	CY62167ELL-45ZXIT	150	0	1000	30	0
ZT32RADLNC	RA	MR151063	R1	CY62128ELL-45ZXI	150	0	500	30	0
ZT32RADLNC	RA	MR151063	R1	CY62128ELL-45ZXI	150	0	1000	30	0
ZT32RAEDLN	RA	MR152005	R1	CY62128EV30LL-45ZXIT	150	0	500	30	0
ZT32RAEDLN	RA	MR152005	R1	CY62128EV30LL-45ZXIT	150	0	1000	30	0
ZT28R2ABGN	JT	MR152040	R1	CY62256NLL-55ZXAT	150	0	1000	30	0
ZT48AIALLC	G	MR152050	R1	CY62167ELL-45ZXIT	150	0	500	30	0



ZT48AIALLC	G	MR152050	R1	CY62167ELL-45ZXIT	150	0	1000	30	0
ZT32RBBALL	T	MR152062	R1	CG8339AAT	150	0	1000	30	0
ZT32RAEDLN	RA	MR153024	R1	CY62128EV30LL-45ZXI	150	0	500	30	0
ZT32RAEDLN	RA	MR153024	R1	CY62128EV30LL-45ZXI	150	0	1000	30	0
ZT48AIALLC	G	MR153046	R1	CY62167EV30LL-45ZXI	150	0	500	30	0
ZT48AIALLC	G	MR153046	R1	CY62167EV30LL-45ZXI	150	0	1000	30	0
ZT32RADLNC	RA	MR154003	R1	CY62128ELL-45ZXIT	150	0	500	30	0
ZT32RADLNC	RA	MR154003	R1	CY62128ELL-45ZXIT	150	0	1000	30	0
ZT32RBBALL	T	MR154008	R1	CY62128ELL-45ZXA	150	0	1000	30	0

Summary for Package Family: TSOP (Pb-free) 19 records

Sum 670 0

TSOP- Reverse (Pb-free)

ZY28R2CLN	JT	MR154016	R2	CY62256NLL-70ZRXI	150	0	500	30	0
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Summary for Package Family: TSOP- Reverse (Pb-free) 1 record

Sum 30 0

TSOP I (Pb-Free)

ZB32FRAAGL	G	MR143030	R1	FM28V100-TG	150	0	1000	30	0
ZB32FRAAGL	G	MR144034	R1	FM28V100-TGTR	150	0	500	30	0
ZB32FRAAGL	G	MR144034	R1	FM28V100-TGTR	150	0	1000	30	0
ZB32FRAAGL	G	MR151050	R1	FM28V100-TGTR	150	0	500	30	0
ZB32FRAAGL	G	MR151050	R1	FM28V100-TGTR	150	0	1000	30	0
ZB32FRAAGL	G	MR152064	R1	FM28V100-TGTR	150	0	500	30	0



ZB32FRAAGL	G	MR152064	R1	FM28V100-TGTR	150	0	1000	30	0
ZB32FRAAGL	G	MR153033	R1	FM28V100-TGTR	150	0	500	30	0
ZB32FRAAGL	G	MR153033	R1	FM28V100-TGTR	150	0	1000	30	0
ZB32RHABLN	JT	MR153040	R1	CY62138FV30LL-45ZAXAT	150	0	1000	30	0
ZB32FRAAGL	G	MR154019	R1	FM28V100-TGTR	150	0	500	30	0

Summary for Package Family: TSOP I (Pb-Free) 11 records

Sum 330 0

TSOP II (Pb-Free)

ZW444AKDLN	JT	131001	R4	CY7C1041CV33-12ZSXE	150	0	1000	80	0
ZW44AXYLNC	RA	150409	R2	CY62147GE30-45ZSXIES	150	0	500	80	0
ZW44AXYLNC	RA	150409	R2	CY62147GE30-45ZSXIES	150	0	1000	80	0
ZW44AWALSC	JT	150410	R1	CY7S1041G30-10ZSXIES	150	0	500	80	0
ZW44AWALSC	JT	150410	R1	CY7S1041G30-10ZSXIES	150	0	1000	80	0
ZW32AAALRC	T	150412	R1	CY62148G-45ZSXIES	150	0	500	80	0
ZW32AAALRC	T	150412	R1	CY62148G-45ZSXIES	150	0	1000	80	0
ZW44AWAZLN	JT	150416	R1	CY7C1041G30-10ZSXE	150	0	1000	85	0
ZW44AXYLNC	RA	154102	R4	CY62147GE30-45ZSXIES	150	0	500	80	0
ZW44AXYLNC	RA	154102	R4	CY62147GE30-45ZSXIES	150	0	1000	80	0
ZW44BRXAGL	G	MR143023	R1	FM22L16-55-TGTR	150	0	1000	30	0
ZW44BRXAGL	G	MR144026	R1	FM22L16-55-TG	150	0	1000	30	0
ZW444ALLR	G	MR144056	R1	CY7C1059DV33-10ZSXI	150	0	1000	30	0
ZW44BRXAGL	G	MR151023	R1	FM22L16-55-TG	150	0	500	30	0
ZW44BRXAGL	G	MR151023	R1	FM22L16-55-TG	150	0	1000	30	0



ZW444AMLNC	JT	MR151047	R1	CY62157ELL-45ZSXI	150	0	500	45	0
ZW444AMLNC	JT	MR151047	R2	CY62157ELL-45ZSXI	150	0	500	45	0
ZW444AMLNC	JT	MR151047	R3	CY62157ELL-45ZSXI	150	0	500	45	0
ZW44AYAGLC	RA	MR151056	R1	CY7C1041DV33-10ZSXIT	150	0	500	30	0
ZW44AYAGLC	RA	MR151056	R1	CY7C1041DV33-10ZSXIT	150	0	1000	30	0
ZW444AKDLN	JT	MR152039	R1	CY7C1041CV33-12ZSXET	150	0	1000	30	0
ZW324FBGL	T	MR152052	R1	CY7C1019CV33-10ZXAT	150	0	1000	30	0
ZW44BRXAGL	G	MR152053	R1	FM22L16-55-TGTR	130	0	500	30	0
ZW44BRXAGL	G	MR152053	R1	FM22L16-55-TGTR	130	0	1000	30	0
ZW44AYAGLC	RA	MR152054	R1	CY7C1041DV33-10ZSXIT	150	0	500	30	0
ZW44AYAGLC	RA	MR152054	R1	CY7C1041DV33-10ZSXIT	150	0	1000	30	0
ZW324GALLC	T	MR153002	R1	CY7C1019DV33-10ZSXI	150	0	500	30	0
ZW324GALLC	T	MR153002	R1	CY7C1019DV33-10ZSXI	150	0	1000	30	0
ZW44AYAGLC	RA	MR153004	R1	CY7C1041DV33-10ZSXI	150	0	500	30	0
ZW44AYAGLC	RA	MR153004	R1	CY7C1041DV33-10ZSXI	150	0	1000	30	0
ZW444ALLR	G	MR153049	R1	CY7C1051DV33-10ZSXI	150	0	500	30	0
ZW444ALLR	G	MR153049	R1	CY7C1051DV33-10ZSXI	150	0	1000	30	0
ZW44AXYAGL	RA	MR154007	R1	CY7C1041LV33-10ZSXIT	150	0	500	30	0
ZW44AXYAGL	RA	MR154007	R1	CY7C1041LV33-10ZSXIT	150	0	1000	30	0
ZW444AKDLN	JT	MR154011	R1	CY7C1041CV33-12ZSXET	150	0	1000	30	0
ZW324FBGL	T	MR154012	R1	CY7C1019CV33-10ZXAT	150	0	1000	27	0



ZW44BRXAGL	G	MR154034	R1	FM22L16-55-TG	150	0	500	30	0
ZW44ABYGLC	RA	MR161006	R1A	CY62146EV30LL-45ZSXIT	150	0	500	30	0
Summary for Package Family: TSOP II (Pb-Free)					38	records			
Sum								1687	0
TSSOP (Pb-Free)									
ZZ0812BGL	T	MR143038	R1	CY2304NZZXI-1T	150	0	1000	30	0
ZZ0812BGL	T	MR144037	R1	CY2304NZZXC-1T	150	0	1000	30	0
ZZ1620GBAN	RA	MR151020	R1	CY22393FXCT	150	0	1000	30	0
ZZ0812BGL	T	MR151028	R1	CY2304NZZXI-1T	150	0	500	30	0
ZZ0812BGL	T	MR151028	R1	CY2304NZZXI-1T	150	0	1000	30	0
ZZ1620GANC	RA	MR152006	R1	CY22392FXI	150	0	500	30	0
ZZ1620GANC	RA	MR152006	R1	CY22392FXI	150	0	1000	30	0
ZZ0812BGL	T	MR152041	R1	CY2304NZZXI-1T	150	0	500	30	0
ZZ2014BGNC	T	MR153001	R1	CY25404ZXI217T	150	0	500	30	0
ZZ2014BGNC	T	MR153001	R1	CY25404ZXI217T	150	0	1000	30	0
ZZ1620GBAN	RA	MR153005	R1	CY22394FXCT	150	0	500	30	0
ZZ1620GBAN	RA	MR153005	R1	CY22394FXCT	150	0	1000	30	0
Summary for Package Family: TSSOP (Pb-Free)					12	records			
Sum								360	0



Summary Detail -- PCT Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS
FBGA (0.75-0.8, 0.3mm, Pb-free)											
BK48MRLZLL	G	150417	R1	CY7C1041G30-10BAJXE	121	0	96	85	0		
BK48MRLZLL	G	150417	R1	CY7C1041G30-10BAJXE	121	0	168	85	0		
BK48MRLZLL	G	150417	R2	CY7C1041G30-10BAJXE	121	0	96	85	0		
BK48MRLZLL	G	150417	R3	CY7C1041G30-10BAJXE	121	0	96	85	0		
BK48MARZLL	RA	151316	R1	CY7C1041G30-10BAJXE	121	0	96	85	0		
BK48MARZLL	RA	151316	R1	CY7C1041G30-10BAJXE	121	0	168	85	0		
BK48MARZLL	RA	151316	R2	CY7C1041G30-10BAJXE	121	0	96	85	0		
BK48MARZLL	RA	151316	R2	CY7C1041G30-10BAJXE	121	0	168	85	0		
BK48MARZLL	RA	151316	R3A	CY7C1041G30-10BAJXE	121	0	96	85	0		
BK48MARZLL	RA	151316	R3A	CY7C1041G30-10BAJXE	121	0	168	85	0		
BK24AAAALC	SB	153701	R1	CY14V101QS-BK108XQES	121	0	168	80	0		
BK48HAGLL	G	154004	R1	CY14B104NA-BA45XE	121	0	96	80	0		
BK48HAGLL	G	154004	R1	CY14B104NA-BA45XE	121	0	168	80	0		
BK48HAGLL	G	154004	R2	CY14B104NA-BA45XE	121	0	96	80	0		
BK48HAGLL	G	154004	R2	CY14B104NA-BA45XE	121	0	168	80	0		
BK48HAGLL	G	154004	R3	CY14B104NA-BA45XE	121	0	96	80	0		
BK48HAGLL	G	154004	R3	CY14B104NA-BA45XE	121	0	168	80	0		
BK48HAGLL	G	154103	R1	CY14B104NA-BA45XE	121	0	96	80	0		
BK48HAGLL	G	154103	R1	CY14B104NA-BA45XE	121	0	168	80	0		

BK48HAGLL	G	154103	R2	CY14B104NA-BA45XE	121	0	96	80	0
BK48HAGLL	G	154103	R2	CY14B104NA-BA45XE	121	0	168	80	0
BK48HAGLL	G	154103	R3	CY14B104NA-BA45XE	121	0	96	80	0
BK48HAGLL	G	154103	R3	CY14B104NA-BA45XE	121	0	168	80	0
BK60AAAALL	G	154604	R1	CY14B116N-BA25XIES	121	0	168	78	0
BK60AAAALL	G	154604	R2	CY14B116N-BA25XIES	121	0	168	80	0
BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	121	0	168	78	0
BK48REALLC	SB	160703	R2	CY14V101LA-BA45XIKK	121	0	168	80	0
BK48REALLC	SB	160703	R2	CY14V101LA-BA45XIKK	121	0	288	80	0
BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	121	0	288	78	0
BK48RFALLC	SB	160703	R4	CY14B104NA-BA25XIKK	121	0	168	80	0
BK48RFALLC	SB	160703	R4	CY14B104NA-BA25XIKK	121	0	288	80	0
BK48PAALL	RA	MR143012	R1	CY14V101LA-BA45XIT	121	0	288	29	0
BK48NZAGLC	G	MR143049	R1	CY14B101LA-BA45XI	121	0	288	19	0
BK48PAALLC	RA	MR151017	R1	CY14V101LA-BA45XIT	121	0	168	30	0
BK48PAALLC	RA	MR151017	R1	CY14V101LA-BA45XIT	121	0	288	30	0
BK48DLALL	G	MR151061	R1	CY62177EV30LL-55BAXIT	121	0	168	30	0
BK48PAALLC	RA	MR152012	R1	CY14V101LA-BA45XI	121	0	168	30	0
BK48PAALLC	RA	MR152012	R1	CY14V101LA-BA45XI	121	0	288	30	0
BK48DLALL	G	MR152049	R1	CG8208AA	121	0	168	30	0
BK48MABALL	G	MR152063	R1	CY7C1011CV33-10BAJXET	121	0	96	30	0
BK48MABALL	G	MR152063	R1	CY7C1011CV33-10BAJXET	121	0	168	30	0
BK48DLALL	G	MR153011	R1	CY62177EV30LL-55BAXI	121	0	168	28	0



BK48CDGLL	G	MR153043	R1	CY7C1041CV33-10BAXET	121	0	96	34	0
BK48HAGLL	G	MR153052	R1	CY14B104NA-BA20XIT	121	0	168	30	0
Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)			44	records					
Sum								2904	0
FBGA (1.0-1.27)									
BB165BWALE	G	MR152022	R1	CY7C1520KV18-250BZC	121	0	168	30	0
BB165CWALE	G	MR153047	R1	CY7C1312KV18-333BZC	121	0	168	30	0
BB165BULEC	G	MR154010	R1	CY7C1518KV18-250BZI	121	0	168	30	0
Summary for Package Family: FBGA (1.0-1.27)			3	records					
Sum								90	0
FBGA (1.0-1.27, Pb-free)									
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	121	0	168	80	0
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	121	0	288	80	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	121	0	168	79	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	121	0	168	77	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	121	0	288	76	0
BW165TCLLD	SB	153602	R5	CY7C1514KV18-250BZXC	121	0	168	77	0
BW165VALLD	SB	153605	R1	CY7C1381KV33-100BZXI	121	0	168	77	0
BW165CELLC	G	MR153045	R1	CY7C1414LV18-250BZXC	121	0	168	30	0
Summary for Package Family: FBGA (1.0-1.27, Pb-free)			8	records					
Sum								576	0

VFBGA (0.75-0.8, 0.3mm, Pb-Free)



BZ48ARLZLL	G	150418	R1	CY62147G30-55BVXE	121	0	96	85	0
BZ48ARLZLL	G	150418	R3	CY62147G30-55BVXE	121	0	96	85	0
BZ48ARLZLL	G	150418	R2	CY62147G30-55BVXE	121	0	96	85	0
BZ48A	SB	152202	R1	CY62157EV30LL-45BVXI	121	0	168	80	0
BZ48A	SB	152202	R2	CY62157EV30LL-45BVXI	121	0	168	80	0
BZ48A	SB	152202	R2	CY62157EV30LL-45BVXI	121	0	288	76	0
BZ48EDALLC	SB	152202	R4	CY62167EV30LL-45BXIKK	121	0	168	80	0
BZ48EDALLC	SB	152202	R4	CY62167EV30LL-45BXIKK	121	0	288	80	0
BZ48ARHLLC	RA	152405	R1	CY62167GE18-55BVXI	121	0	168	80	0
BZ48ARHLLC	RA	152405	R1	CY62167GE18-55BVXI	121	0	288	80	0
BZ48ARKLLC	RA	152405	R2	CY7C1061G18-15BV1XI	121	0	168	80	0
BZ48ARKLLC	RA	152405	R2	CY7C1061G18-15BV1XI	121	0	288	79	0
BZ48ARKLLC	RA	152405	R3	CY7C1061GE30-10BVXI	121	0	168	80	0
BZ48ARKLLC	RA	152405	R3	CY7C1061GE30-10BVXI	121	0	288	80	0
BZ124AAALC	G	153304	R1	CY8C4248BZI-L489ES	121	0	168	78	0
BZ124AAALC	G	153304	R1	CY8C4248BZI-L489ES	121	0	288	78	0
BZ48CFBALL	G	MR151065	R1	CY62157EV30LL-45BVXA	121	0	168	30	0
BZ48CFBALL	G	MR151065	R1	CY62157EV30LL-45BVXA	121	0	168	30	0
BZ48ZEALEC	RA	MR152032	R1	CY62157EV30LL-45BVXIT	121	0	168	30	0



BZ48CFBALL	G	MR153041	R1	CY62157EV30LL-45BVXA	121	0	96	30	0
BZ48CFBALL	G	MR153041	R1	CY62157EV30LL-45BVXA	121	0	168	30	0
Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)				21	records				
Sum								1436	0

UFBGA (Pb-free)

BU70AABALE	AC	MR141062	R1	CYTMA568-70BUI58AD	121	0	288	28	0
BU60AAAAAL	G	MR142002	R1	CY8CTMA463-60BUI	121	0	168	30	0
BU60AAAAAL	G	MR142002	R1	CY8CTMA463-60BUI	121	0	288	30	0
BU70AABALE	AC	MR142063	R1	CYTMA568-70BUI58ADT	121	0	288	29	0
BU70AAAALE	G	MR143031	R1	CYTMA568-70BUI58ZZT	121	0	288	30	0
BU70AABALE	AC	MR144045	R1	CYTMA568-70BUI58BB	121	0	168	30	0
BU70AABALE	AC	MR144045	R1	CYTMA568-70BUI58BB	121	0	288	30	0
BU70AAAALE	G	MR144048	R1	CP8160ATT	121	0	288	30	0
Summary for Package Family: UFBGA (Pb-free)				8	records				
Sum								237	0

FLIPCHIP BGA (Pb-Free)

FR361BALL	G	150905	R2	CY7C4121KV13-600FCXC	121	0	168	80	0
FR361BALL	G	150905	R2	CY7C4121KV13-600FCXC	121	0	288	80	0
Summary for Package Family: FLIPCHIP BGA (Pb-Free)				2	records				
Sum								160	0



FLIPCHIP CSP (Pb-Free)

FN76AADRCD	DT	151202	R1	CY8C4248FNI-BL483EST	121	0	168	28	0
FN60BADRFD	DT	151302	R1A	CY62167ESL-55FNXIES	121	0	96	80	0
FN60BADRFD	DT	151302	R1	CY62167ESL-55FNXIES	121	0	96	1	0
FN60BADRFD	DT	151302	R1A	CY62167ESL-55FNXIES	121	0	168	80	0
FN60BADRFD	DT	151302	R1	CY62167ESL-55FNXIES	121	0	168	1	0
FN99AADRFD	DT	151404	R3A	CY8C5888FNI-LP210EST	121	0	96	80	0
FN99AADRFD	DT	151404	R3B	CY8C5888FNI-LP210EST	121	0	96	80	0
FN99AADRFD	DT	151404	R3A	CY8C5888FNI-LP210EST	121	0	168	80	0
FN99AADRFD	DT	151404	R4	CY8C5888FNI-LP210EST	121	0	96	80	0
FN99AADRFD	DT	151404	R4	CY8C5888FNI-LP210EST	121	0	288	80	0
FN16AADRFD	DT	152203	R1	8F44302AC	121	0	96	77	0
FN16AADRFD	DT	152203	R1	8F44302AC	121	0	168	77	0
FN16AADRFD	DT	152203	R2	8F44302AC	121	0	96	77	0
FN16AADRFD	DT	152203	R2	8F44302AC	121	0	168	77	0

**Summary for Package Family:
FLIPCHIP CSP (Pb-Free)**

14 records

Sum 898 0

QFN (COL, 0.6mm, Saw Type, Pb-free)

LG16AEAAAL	MB	MR134067	R1	CY8C20236A-24LKXI	121	0	288	30	0
LG16AEAAAL	MB	MR141059	R1	CY8C20236A-24LKXI	121	0	168	30	0
LG16ABAALL	L	MR151060	R1	CY8C20236A-24LKXAT	121	0	96	30	0
LG16ABAALL	L	MR151060	R1	CY8C20236A-24LKXAT	121	0	168	26	0



LG16ABAALL	L	MR161002	R1	CY8C20236A-24LKXAT	121	0	96	30	0
Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)			5	records					
Sum								146	0

QFN (Saw Type, Pb-Free)

LQ48ADAAAL	G	142308	R2	CY8CTMA443-48LQIES2	121	0	288	80	0
LQ16ABARC	G	144602	R2	CY8CMBR3108-LQXI	121	0	168	80	0
LQ16ABARC	G	144602	R2	CY8CMBR3108-LQXI	121	0	288	80	0
LT48DBBAAL	RA	145002	R1	CY27410FLTXI	121	0	288	85	0
LT48DBBAAL	RA	150304	R2	CY27410FLTXI	121	0	288	85	0
LN28ABAALC	UT	150907	R1	CYTMA525A-28LNI18ZZES	121	0	168	80	0
LN28ABAALC	UT	150907	R1	CYTMA525A-28LNI18ZZES	121	0	288	80	0
LN28ABAALC	UT	150907	R2	CYTMA525A-28LNI18ZZES	121	0	168	80	0
LN28ABAALC	UT	150907	R2	CYTMA525A-28LNI18ZZES	121	0	288	80	0
LN28ABAALC	UT	150907	R3	CYTMA525A-28LNI18ZZES	121	0	168	80	0
LN28ABAALC	UT	150907	R3_Split 1	CYTMA525A-28LNI18ZZES	121	0	288	68	0
LN28ABAALC	UT	150907	R3_Split 2	CYTMA525A-28LNI18ZZES	121	0	288	12	0
LQ48AGAALC	RA	151008	R1	CYTT214032-48LQI36ES	121	0	168	75	0
LQ48AGAALC	RA	151008	R2	CYTT214032-48LQI36ES	121	0	168	78	0
LQ56AAAALC	RA	151203	R1	CY8C4248LQI-BL483ES	121	0	168	80	0
LQ56AAAALC	RA	151203	R4	CYBL10562-56LQXI	121	0	168	25	0
LQ56AAAALC	RA	151203	R4	CYBL10562-56LQXI	121	0	288	22	0
LQ56AAAALC	RA	151203	R4_Split 1	CYBL10562-56LQXI	121	0	288	3	0



LQ56AAAALC	RA	151203	R5	CYBL10462-56LQXI	121	0	168	25	0
LQ56AAAALC	RA	151203	R5	CYBL10462-56LQXI	121	0	288	18	0
LQ56AAAALC	RA	151203	R5__Split 1	CYBL10462-56LQXI	121	0	288	7	0
LQ56AAAALC	RA	151203	R7	CG8370AM	121	0	168	25	0
LQ56AAAALC	RA	151203	R8	CG8423AM	121	0	168	25	0
LQ56AAAALC	RA	151203	R9	CG8370AM	121	0	168	25	0
LQ56AAAALC	RA	151204	R1	CY8C4248LQI-BL483ES	121	0	168	80	0
LQ24AABALC	RA	151303	R1	CY8CMBR3106S2-LQXI	121	0	168	80	0
LT56BVAAAL	G	151313	R1	CY8C24894-24LTXA	121	0	96	80	0
LT56BVAAAL	G	151313	R1	CY8C24894-24LTXA	121	0	168	80	0
LT56BVAAAL	G	151313	R2	CY8C24894-24LTXA	121	0	96	80	0
LT56BVAAAL	G	151313	R2	CY8C24894-24LTXA	121	0	168	80	0
LT56BVAAAL	G	151313	R3	CY8C24894-24LTXA	121	0	96	80	0
LT56BVAAAL	G	151313	R3	CY8C24894-24LTXA	121	0	168	80	0
LQ56BEAALC	RA	151402	R2	CYTT214032-56LQI44	121	0	168	80	0
LQ56BEAALC	RA	151402	R2	CYTT214032-56LQI44	121	0	288	80	0
LT48EQAAAL	G	152902	R1	CYWUSB6953-48LTXC	121	0	288	25	0
LT48EQAAAL	G	152902	R2	CYWUSB6953-48LTXC	121	0	288	25	0
LT48EQAAAL	G	152902	R3	CYWUSB6953-48LTXC	121	0	288	25	0
LT48EQAAAL	G	152902	R4	CYWUSB6953-48LTXC	121	0	168	30	0
LT48EQAAAL	G	152902	R5	CYWUSB6953-48LTXC	121	0	168	30	0
LT48EQAAAL	G	152902	R6	CYWUSB6953-48LTXC	121	0	168	30	0
LT48DDBARC	G	152903	R1	CY27410FLTXI	121	0	168	80	0



LQ16ABARC	G	152915	R1	CY8CMBR3108-LQXI	121	0	168	80	0
LQ16ABARC	G	152915	R1	CY8CMBR3108-LQXI	121	0	288	80	0
LQ16AAAALC	RA	153503	R1	CY8CMBR3108-LQXI	121	0	168	80	0
LQ16AAAALC	RA	153503	R1	CY8CMBR3108-LQXI	121	0	288	80	0
LQ16AAAALC	RA	153503	R2	CY8CMBR3108-LQXI	121	0	168	80	0
LQ16AAAALC	RA	153503	R2	CY8CMBR3108-LQXI	121	0	288	80	0
LT88BBAPRC	UT	154702	R1	CS8481AA	121	0	168	80	0
LT88BBAPRC	UT	154702	R1	CS8481AA	121	0	288	80	0
LQ48AGAALC	RA	155008	R1	CYTMA445A-48LQI36AB	121	0	168	80	0
LQ48AGAALC	RA	155008	R1	CYTMA445A-48LQI36AB	121	0	288	80	0
LQ48AGAALC	RA	155008	R1A	CYTMA445A-48LQI36AB	121	0	168	80	0
LQ48AGAALC	RA	155008	R1A	CYTMA445A-48LQI36AB	121	0	288	80	0
LQ48AGAALC	RA	155108	R1	CYTMA445A-48LQI36ZZ	121	0	168	80	0
LQ48AGAALC	RA	155108	R1	CYTMA445A-48LQI36ZZ	121	0	288	80	0
LQ48AGAALC	RA	155108	R2	CYTMA445A-48LQI36ZZ	121	0	168	80	0
LQ48AGAALC	RA	155108	R2	CYTMA445A-48LQI36ZZ	121	0	288	80	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	121	0	168	80	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	121	0	288	78	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	121	0	288	2	0
LQ24AABALC	RA	160407	R1	CY8CMBR4013-LQXI	121	0	168	80	0
LQ48AGAALC	RA	160610	R1	CYTMA445A-48LQI36ZZ	121	0	168	80	0
LQ48AGAALC	RA	160610	R1	CYTMA445A-48LQI36ZZ	121	0	288	80	0
LQ48AGAALC	RA	160610	R2	CYTMA445A-48LQI36ZZ	121	0	168	79	0



LQ48AGAALC	RA	160610	R2	CYTMA445A-48LQI36ZZ	121	0	288	77	0
LQ48AGAALC	RA	160610	R3	CYTMA445A-48LQI36ZZ	121	0	168	80	0
LQ48AGAALC	RA	160610	R3	CYTMA445A-48LQI36ZZ	121	0	288	80	0
LQ48AGAALC	RA	160610	R4	CYTMA445A-48LQI36ZZ	121	0	168	80	0
LQ48AGAALC	RA	160610	R4	CYTMA445A-48LQI36ZZ	121	0	288	80	0
LT48AQAALC	G	MR141052	R1	CY8C20636A-24LTXI	121	0	168	30	0
LT48AQAALC	G	MR141052	R1	CY8C20636A-24LTXI	121	0	288	30	0
LQ24AQAALC	G	MR142001	R1	CG7717AM	121	0	168	30	0
LT48AQAALC	G	MR142006	R1	CY8C20636A-24LTXI	121	0	168	29	0
LT48AQAALC	G	MR142006	R1	CY8C20636A-24LTXI	121	0	288	28	0
LT56BEAGLC	RA	MR144035	R1	CY7C64215-56LTXCT	121	0	168	30	0
LQ48AGAALC	RA	MR151008	R1	CYTMA445A-48LQI36ZZT	121	0	288	30	0
LT32BAABGL	RA	MR151009	R1	CG7558AAT	121	0	168T	30	0
LQ16ABBALC	UT	MR151013	R1	CG8356AAT	121	0	288	30	0
LQ16ABARC	G	MR151019	R1	CG8164AAT	121	0	288	30	0
LQ44AHAARC	G	MR151045	R1	CYTMA445A5-44LQI28AB	121	0	168	30	0
LT32BAABGL	RA	MR152002	R1	CG7558AAT	121	0	168	30	0
LQ48AGAALC	RA	MR152003	R1	CG8364AM	121	0	168	30	0
LQ48AGAALC	RA	MR152003	R1	CG8364AM	121	0	288	30	0
LQ16ABARC	G	MR152008	R1	CY8CMBR3108-LQXIT	121	0	168	30	0
LQ16ABARC	G	MR152008	R1	CY8CMBR3108-LQXIT	121	0	288	30	0
LQ56AAAALC	RA	MR152009	R4	CYBL10563-56LQXI	121	0	168	80	0
LQ56AAAALC	RA	MR152009	R4	CYBL10563-56LQXI	121	0	288	77	0



LQ16ABBALC	UT	MR152011	R1	CG8356AAT	121	0	168	29	0
LQ16ABBALC	UT	MR152011	R1	CG8356AAT	121	0	288	29	0
LQ40AABALC	RA	MR153009	R1	CY8C4245LQI-483T	121	0	168	30	0
LQ40AABALC	RA	MR153009	R1	CY8C4245LQI-483T	121	0	288	30	0
LT56YAAALC	G	MR153026	R1	CG7786AAT	121	0	168	30	0
LQ16ABBALC	UT	MR153034	R1	CY8C4014LQI-421T	121	0	168	30	0
LQ16ABBALC	UT	MR153034	R1	CY8C4014LQI-421T	121	0	288	30	0

Summary for Package Family:
QFN (Saw Type, Pb-Free)
Sum

94 records

5341 0

QFN (Punch Type,Pb-Free)

LY56DGAGL	L	MR161004	R1	CY8CTMA120-56LFXAT	121	0	96	30	0
LY56DGAGL	L	MR161004	R1	CY8CTMA120-56LFXAT	121	0	168	29	0

Summary for Package Family:
QFN (Punch Type, Pb-Free)
Sum

2 records

59 0

QFN (Punch Type, Wettable Flank, Pb-Free)

LW56DGAZGL	L	MR152037	R1	CP7598ATT	121	0	96	30	0
LW56DGAZGL	L	MR152037	R1	CP7598ATT	121	0	168	30	0
LW56DGAZGL	L	MR153021	R1	CP7598ATT	121	0	96	30	0
LW56DGAZGL	L	MR153021	R1	CP7598ATT	121	0	168	30	0



LW56DGAZGL	L	MR154004	R1	CP7598ATT	121	0	96	30	0
LW56DGAZGL	L	MR161005	R1	CP7598ATT	121	0	96	30	0
Summary for Package Family:			6	records					
QFN (Punch Type, Wettable Flank, Pb-Free)									
Sum								180	0

DFN, 0.8mm Thickness (Saw Type)

LH08DBAALC	UT	150502	R1	CY15B104Q-LHXIES	121	0	168	80	0
LH08DBAALC	UT	150502	R1	CY15B104Q-LHXIES	121	0	288	34	0
LH14AAAARC	G	152007	R1	CYPD2103-14LHXIES	121	0	168	80	0
LH14AAAARC	G	152007	R1	CYPD2103-14LHXIES	121	0	288	80	0
LH08DAAALL	UT	MR141057	R1	FM25H20-DGTR	121	0	168	30	0
LH08DAAALL	UT	MR142035	R1	FM25H20-DGTR	121	0	168	30	0
LH08DAAALL	UT	MR143025	R1	FM25H20-DGTR	121	0	168	29	0
LH08DAAALL	UT	MR144038	R1	FM25H20-DGTR	121	0	168	30	0
LH08ABAALL	UT	MR151049	R1	FM25L16B-DGTR	121	0	168	30	0
LH08ABAALL	UT	MR151058	R1	FM25L16B-DGTR	121	0	168	30	0
LH08ABAALL	UT	MR152044	R1	FM25L16B-DGTR	121	0	168	30	0
LH08ABAALL	UT	MR152060	R1	FM25L16B-DGTR	121	0	168	30	0
LH08ABAALL	UT	MR153018	R1	FM25L16B-DGTR	121	0	168	30	0
LH08ABAALL	UT	MR153035	R1	FM25L16B-DGTR	121	0	168	30	0
Summary for Package Family: DFN, 0.8mm			14	records					
Thickness (Saw Type)									
Sum								573	0



PDIP (Pb-Free)

PZ283AAARC	LP	151901	R1	CY8C29466-24PXI	121	0	168	80	0		
PZ283AAARC	LP	151901	R1	CY8C29466-24PXI	121	0	288	80	0		
PZ283AAARC	LP	151901	R2	CY8C27443-24PXI	121	0	168	80	0		
PZ283AAARC	LP	151901	R2	CY8C27443-24PXI	121	0	288	80	0		
PZ283AAARC	LP	151901	R3	CY8C24423A-24PXI	121	0	168	80	0		
PZ283AAARC	LP	151901	R3	CY8C24423A-24PXI	121	0	288	80	0		
PZ283AAARC	LP	151901	R4	CY8C29466-24PXI	121	0	168	80	0		
PZ283AAARC	LP	151901	R4	CY8C29466-24PXI	121	0	288	80	0		
PZ283AAARC	LP	151901	R5	CY8C27443-24PXI	121	0	168	80	0		
PZ283AAARC	LP	151901	R5	CY8C27443-24PXI	121	0	288	80	0		
PZ283AAARC	LP	151901	R6	CY8C24423A-24PXI	121	0	168	80	0		
PZ283AAARC	LP	151901	R6	CY8C24423A-24PXI	121	0	288	80	0		
PZ28BDAALL	LP	MR143042	R1	FM1608B-PG	121	0	168	30	0		
PZ28BDAALL	LP	MR144054	R1	FM1608B-PG	121	0	168	30	0		
PZ28BDAALL	LP	MR151025	R1	FM1608B-PG	121	0	168	30	0		
PZ183DPGNC	RA	MR152007	R1	CY7C63813-PXC	121	0	168	30	0		
PZ083AAALL	UT	MR152015	R1	FM25V20-PG	121	0	168	30	0		
PZ083AAALL	UT	MR152055	R1	FM25V20-PG	121	0	168	30	0		
PZ183DPGNC	RA	MR153006	R1	CS6632AF	121	0	168	30	1	MR153006-1P1	Lifted Ball CAR#201542014



PZ183DPGNC	RA	MR153006	R1	CS6632AF	121	0	288	24	0
PZ083AAALL	UT	MR153013	R1	FM25V20-PG	121	0	168	30	0
Summary for Package Family: PDIP			21	records					
Sum								1224	1
PLCC (Pb-Free)									
JZ32RBGAN	M	MR151029	R1	CY7B991V-5JXIT	121	0	168	29	0
Summary for Package Family: PLCC (Pb-Free)			1	record					
Sum								29	0
QSOP (Pb-Free)									
SQ2414ACGN	JT	MR141044	R1	CY7C63823-QXC	121	0	288	30	0
SQ2414ACGN	JT	MR151027	R1	CY7C63823-QXC	121	0	168	30	0
SQ2414ACGN	JT	MR153031	R1	CY7C63823-QXC	121	0	168	30	0
Summary for Package Family: QSOP (Pb-Free)			3	records					
Sum								90	0
SOIC (Pb Free)									
SZ815PBAAN	RA	150403	R4	CY15B256Q-SXA	121	0	96	77	0
SZ815PBAAN	RA	150403	R4	CY15B256Q-SXA	121	0	168	77	0
SZ163AAALC	RA	150407	R1	CY14V101PS-SF108XIES	121	0	168	80	0
SZ163AAALC	RA	150407	R1	CY14V101PS-SF108XIES	121	0	288	80	0
SZ324AALSC	JT	150411	R1	CY62148G-45SXIES	121	0	168	80	0
SZ324AALSC	JT	150411	R1	CY62148G-45SXIES	121	0	288	80	0
SZ820AAGLC	UT	150502	R2	CY15B104Q-SXI	121	0	168	80	0



SZ820AAGLC	UT	150502	R2	CY15B104Q-SXI	121	0	288	80	0
SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	121	0	168	80	0
SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	121	0	288	80	0
SZ1615IALC	UT	152303	R1	CYPD1132-16SXQ	121	0	168	80	0
SZ1615IALC	UT	152303	R1	CYPD1132-16SXQ	121	0	288	80	0
SZ815CGAAS	M	152801	R1	CY2305CSXA-1H	121	0	96	80	0
SZ815CGAAS	M	152801	R1	CY2305CSXA-1H	121	0	168	80	0
SZ815CGAAS	M	152801	R2	CY2305CSXA-1H	121	0	96	80	0
SZ815CGAAS	M	152801	R2	CY2305CSXA-1H	121	0	168	80	0
SZ815CGAAS	M	152801	R3	CY2305CSXA-1H	121	0	96	80	0
SZ815CGAAS	M	152801	R3	CY2305CSXA-1H	121	0	168	80	0
SZ815CGAAS	M	152801	R4	CY2305CSXA-1H	121	0	104	79	0
SZ815CGAAS	M	152801	R4	CY2305CSXA-1H	121	0	168	79	0
SZ815CGAAS	M	152801	R5	CY2305CSXA-1H	121	0	104	80	0
SZ815CGAAS	M	152801	R5	CY2305CSXA-1H	121	0	168	80	0
SZ815CGAAS	M	152801	R6	CY2305CSXA-1H	121	0	104	80	0
SZ815CGAAS	M	152801	R6	CY2305CSXA-1H	121	0	168	80	0
SZ163AAALC	RA	154002	R1	CY14B101Q3A-SFXI	121	0	168	80	0
SZ163AAALC	RA	154002	R1	CY14B101Q3A-SFXI	121	0	288	80	0
SZ163AAALC	RA	154002	R1	CY14B101Q3A-SFXI	121	0	500	80	0
SZ28ABGAS	AC	MR134004	R1	STK12C68-SF45	121	0	168	30	0
SZ28ABGAS	AC	MR141023	R1	STK12C68-SF45	121	0	168	30	0
SZ141ARAGL	UT	MR141037	R1	FM31256-G1	121	0	176	30	0



SW815JRALL	UT	MR141038	R1	FM24CL16B-GTR	121	0	168	30	0
SZ141ARAGL	UT	MR142055	R1	FM31256-GTR	121	0	168	30	0
SW815JRALL	UT	MR142056	R1	FM24CL16B-GTR	121	0	168	30	0
SZ32451BLN	JT	MR143017	R1	CP7896ATT	121	0	168	30	0
SW815JRALL	UT	MR143026	R1	FM24C16B-GTR	121	0	168	30	0
SZ141ARAGL	UT	MR143028	R1	FM31256-GTR	121	0	168	30	0
SZ28ABGAS	AC	MR143043	R1	STK12C68-SF45I	121	0	168	30	0
SW815JRALL	UT	MR144020	R1	FM24C16B-GTR	121	0	168	30	0
SZ141ARAGL	UT	MR144040	R1	FM31256-GTR	121	0	168	30	0
SZ815HRALL	LP	MR151024	R1	FM25V01-GTR	121	0	168	30	0
SZ28ABGAS	AC	MR151026	R1	STK12C68-SF45	121	0	168	30	0
SZ815JRALL	UT	MR151030	R1	FM25CL64B-GTR	121	0	168	30	0
SZ141ARAGL	UT	MR151031	R1	FM31256-G	121	0	168	30	0
SZ28BNRALL	UT	MR151032	R1	FM28V020-SGTR	121	0	168	30	0
SZ815CGAAS	M	MR151035	R1	CY2305CSXA-1HT	121	0	96	30	0
SZ815CGAAS	M	MR151035	R1	CY2305CSXA-1HT	121	0	168	30	0
SZ815JRALL	UT	MR151037	R1	FM25CL64B-GTR	121	0	168	30	0
SW815JRALL	UT	MR151038	R1	FM24CL16B-GTR	121	0	168	30	0
SZ141ARAGL	UT	MR151039	R1	FM31256-GTR	121	0	168	30	0
SW815JRALL	UT	MR151040	R1	FM25C160B-GATR	121	0	168	30	0
SZ28BNRALL	UT	MR151041	R1	FM28V020-SGTR	121	0	168	30	0
SW815JRALL	UT	MR151043	R1	FM24CL64B-GTR	121	0	168	30	0
SZ32451LLC	JT	MR151046	R1	CY62148ELL-55SXI	121	0	168	45	0



SZ32451LLC	JT	MR151046	R2	CY62148ELL-55SXI	121	0	168	45	0
SZ32451LLC	JT	MR151046	R3	CY62148ELL-55SXI	121	0	168	45	0
SZ815HRALL	LP	MR151052	R1	FM25V01-GTR	121	0	176	30	0
SZ183CPANC	RA	MR152010	R1	CY7C63813-SXC	121	0	168	30	0
SW815JRALL	UT	MR152014	R1	FM25C160B-GATR	121	0	168	30	0
SZ815JRALL	UT	MR152016	R2	FM25CL64B-GTR	121	0	168	30	0
SW815JRALL	UT	MR152017	R1	FM24CL16B-GTR	121	0	168	30	0
SZ815CGAAS	M	MR152026	R1	CY2305CSXA-1HT	121	0	96	30	0
SZ815CGAAS	M	MR152026	R1	CY2305CSXA-1HT	121	0	168	30	0
SZ815HRALL	LP	MR152029	R1	FM25V01-GTR	121	0	168	30	0
SW815JRALL	UT	MR152036	R1	FM25C160B-GATR	121	0	168	30	0
SZ1615GAAL	T	MR152038	R1	CY8C20055-24SXIT	121	0	168	30	0
SZ815HRALL	LP	MR152042	R1	FM25V01-GTR	121	0	168	30	0
SW815JRALL	UT	MR152045	R1	FM24C64B-GTR	121	0	168	30	0
SZ820AAAGL	UT	MR152046	R1	FM25V20-G	121	0	168	30	0
SZ28BNRALL	UT	MR152047	R1	FM28V020-SGTR	121	0	168	30	0
SZ141ARAGL	UT	MR152048	R1	FM31256-GTR	121	0	168	30	0
SZ32451BLN	JT	MR152061	R1	CY7C53120E2-10SXI	121	0	168	30	0
SW815JRALL	UT	MR153014	R1	FM24CL64B-GTR	121	0	168	30	0
SZ28BNRALL	UT	MR153015	R1	FM28V020-SGTR	121	0	168	30	0
SZ141ARAGL	UT	MR153016	R1	FM31256-GTR	121	0	168	30	0
SZ815JRALL	UT	MR153017	R1	FM25CL64B-GATR	121	0	168	30	0
SW815JRALL	UT	MR153019	R1	FM24CL16B-GTR	121	0	168	30	0



SW815JRALL	UT	MR153020	R1	FM25C160B-GATR	121	0	168	29	0
SZ815CGAAS	M	MR153022	R1	CY2305CSXA-1HT	121	0	96	30	0
SZ815CGAAS	M	MR153022	R1	CY2305CSXA-1HT	121	0	168	30	0
SZ183CPANC	RA	MR153027	R1	CY7C63813-SXC	121	0	168	30	0
SZ1615GAAL	T	MR153051	R1	CY8C20055-24SXIT	121	0	168	30	0
SZ1615GAAL	T	MR153051	R1	CY8C20055-24SXIT	121	0	288	30	0
SZ820ABASC	UT	MR153053	R1	FM25V20A-G	121	0	168	30	0
SZ815CGAAS	M	MR161001	R1	CY2305CSXA-1HT	121	0	96	30	0
SZ815CGAAS	M	MR161001	R1	CY2305CSXA-1HT	121	0	168	30	0

Summary for Package Family: SOIC (Pb Free) 85 records

Sum 3936 0

SOJ (Pb-Free)

VZ44ADALSC	JT	150411	R2	CY7C1041GE30-10VXI	121	0	168	79	0
VZ44ADALSC	JT	150411	R2	CY7C1041GE30-10VXI	121	0	288	79	0
VZ364AALSC	JT	150411	R3	CY7S1049GE30-10VXI	121	0	168	79	0
VZ364AALSC	JT	150411	R3	CY7S1049GE30-10VXI	121	0	288	79	0
VZ32314CLL	JT	MR144053	R1	CY7C1018DV33-10VXIT	121	0	176	30	0
VZ444ADLNC	JT	MR151048	R1	CY7C1041D-10VXI	121	0	168	45	0
VZ444ADLNC	JT	MR151048	R2	CY7C1041D-10VXI	121	0	168	45	0
VZ32314LLC	JT	MR151048	R3	CY7C1018DV33-10VXI	121	0	168	45	0
VZ32314LLC	JT	MR151048	R4	CY7C1018DV33-10VXI	121	0	168	45	0
VZ32314CLL	JT	MR151057	R1	CY7C1018DV33-10VXIT	121	0	176	30	0
VZ32420DLL	JT	MR152031	R1	CY7C1019DV33-10VXI	121	0	168	30	0



VZ32420DLL	JT	MR153048	R1	CY7C1019DV33-10VXI	121	0	168	30	0
Summary for Package Family: SOJ (Pb-Free)				12	records				
Sum								616	0
SNC (Pb-Free)									
SY2831BHN	JT	MR151059	R1	CG7261ATT	121	0	96	29	0
SY2831BHN	JT	MR151059	R1	CG7261ATT	121	0	168	29	0
SY2831BHN	JT	MR153044	R1	CY62256NLL-55SNXET	121	0	96	30	0
SY2831BHN	JT	MR153044	R1	CY62256NLL-55SNXET	121	0	168	30	0
Summary for Package Family: SNC (Pb-Free)				4	records				
Sum								118	0
SSOP (Pb-Free)									
SP282BAAAL	RA	144001	R4A	CY8C4245PVA-482ES	121	0	96	80	0
SP282BAAAL	RA	144001	R4A	CY8C4245PVA-482ES	121	0	168	80	0
SP282BAAAL	RA	144001	R5A	CY8C4245PVS-482ES	121	0	104	80	0
SP282BAAAL	RA	144001	R5A	CY8C4245PVS-482ES	121	0	168	80	0
SP282BAAAL	RA	144001	R6A	CY8C4125PVS-482ES	121	0	104	80	0
SP282BAAAL	RA	144001	R6A	CY8C4125PVS-482ES	121	0	168	80	0
SP282ABBGNC	RA	152915	R3	CY8C21534B-24PVXI	121	0	168	80	0
SP282ABBGNC	RA	152915	R3	CY8C21534B-24PVXI	121	0	288	80	0
SP282EAALC	RA	153607	R1	CY8C4246PVI-D412ES	121	0	168	79	0
SP282EAALC	RA	153607	R5	CY8C4246PVI-D412ES	121	0	168	80	0
SP2024CAGL	M	MR151033	R1	CY8C21334-24PVXAT	121	0	168	29	0
SP563DBGNC	JT	MR151044	R1A	CY7C66113C-PVXC	121	0	168	45	0



SP483ABANC	JT	MR151044	R2	CY7C63413C-PVXC	121	0	168	45	0
SP483ABANC	JT	MR151044	R2	CY7C63413C-PVXC	121	0	288	45	0
SP483ABANC	JT	MR151044	R3	CY7C63413C-PVXC	121	0	168	44	0
SP483ABANC	JT	MR151044	R3	CY7C63413C-PVXC	121	0	288	44	0
SP2822BGL	M	MR152027	R1	CY8C21534-12PVXET	121	0	104	30	0
SP2822BGL	M	MR152027	R1	CY8C21534-12PVXET	121	0	168	30	0
SP483JABLL	JT	MR152028	R1	CY8C21645-12PVXET	121	0	96	30	0
SP483JABLL	JT	MR152028	R1	CY8C21645-12PVXET	121	0	168	30	0
SP282ABGNC	RA	MR152030	R1	CY7C64215-28PVXCT	121	0	168	30	0
SP282ABGNC	RA	MR153007	R1	CY7C64215-28PVXCT	121	0	168	30	0
SP2024CAGL	M	MR153023	R1	CY8C21334-24PVXAT	121	0	96	30	0
SP2024CAGL	M	MR153023	R1	CY8C21334-24PVXAT	121	0	168	30	0

Summary for Package Family: SSOP (Pb-Free) 24 records

Sum 1291 0

TQFP (Pb-Free)

AY64GAAASC	G	144805	R1	CY8C4247AZI-M485ES	121	0	288	80	0
AZ48CAAASC	JT	145009	R1	CY8C4246AZI-M443ES	121	0	168	80	0
AZ48CAAASC	JT	145009	R1	CY8C4246AZI-M443ES	121	0	288	80	0
AZ100RTLLC	R	150503	R3	CY7C1460KV33-200AXC	121	0	288	80	0
AZ44ASHLLC	R	151008	R5	CY8C42452AXI-483	121	0	168	80	0
AZ44ASHLLC	R	151008	R5	CY8C42452AXI-483	121	0	288	80	0
AZ44ASHLLC	R	151403	R1	CY8C42452AXI-483	121	0	168	80	0
AZ44ASHLLC	R	151403	R1	CY8C42452AXI-483	121	0	288	80	0



AZ100SMALC	R	152001	R1	CYFPA1EFR-ES	121	0	168	160	0
AZ100SMALC	R	152001	R2	CYFPA1EFR-ES	121	0	168	160	0
AZ100SMALC	R	152001	R3	CYFPA1EFR-ES	121	0	168	160	0
AZ100RZLLC	G	152402	R1	CY7C1370KVE33-167AXI	121	0	168	80	0
AZ100RZLLC	G	152402	R1	CY7C1370KVE33-167AXI	121	0	288	80	0
AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	121	0	168	80	0
AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	121	0	288	80	0
AZ128EAZAS	G	152603	R1A	CYAT81688-128AS88ES	121	0	96	80	0
AZ128EAZAS	G	152603	R1A	CYAT81688-128AS88ES	121	0	168	80	0
AZ128EAZAS	G	152603	R2	CYAT81688-128AS88ES	121	0	96	80	0
AZ128EAZAS	G	152603	R2	CYAT81688-128AS88ES	121	0	168	79	0
AZ128EAZAS	G	152603	R3	CYAT81688-128AS88ES	121	0	96	80	0
AZ128EAZAS	G	152603	R3	CYAT81688-128AS88ES	121	0	168	80	0
AZ100SJAAL	R	152607	R1	CYAT81688-100AS71ES	121	0	96	80	0
AZ100SJAAL	R	152607	R1	CYAT81688-100AS71ES	121	0	168	80	0
AZ100RBCLN	JT	152915	R2	CY7C1370D-167AXC	121	0	168	80	0
AZ100RBCLN	JT	152915	R2	CY7C1370D-167AXC	121	0	288	80	0
AZ120EAGAR	M	153009	R1	7C08323C	121	0	168	78	0
AZ120EAGAR	M	153009	R2	7C08323C	121	0	168	79	0
AZ120EAGAR	M	153009	R3	7C08323C	121	0	168	80	0
AY64GAAASC	G	153201	R1	CY8C4248AZI-L485ES	121	0	168	80	0
AZ48BAAASC	T	153305	R1	CY8C4247AZI-L423ES	121	0	168	80	0
AZ48BAAASC	T	153305	R1	CY8C4247AZI-L423ES	121	0	288	80	0



AZ100RMBLN	R	153503	R4	CY7C1370D-167AXC	121	0	168	80	0
AZ100RMBLN	R	153503	R3	CY7C1370D-167AXC	121	0	168	80	0
AZ100RMBLN	R	153503	R3	CY7C1370D-167AXC	121	0	288	80	0
AZ64EXGAAL	G	MR142005	R1	CP5790DM	121	0	168	30	0
AZ64EXGAAL	G	MR142005	R1	CP5790DM	121	0	288	30	0
AZ32GXGAN	G	MR143052	R1	CY29940AXI	121	0	168	30	0
AZ64EXGALC	G	MR151010	R1	CY7C53150-20AXI	121	0	168	30	0
AZ64EXGALC	G	MR151010	R1	CY7C53150-20AXI	121	0	288	30	0
AZ44ASAGRC	G	MR151011	R1	CY8C22545-24AXI	121	0	168	30	0
AZ100RUCLN	JT	MR151064	R2	CG7685AA	121	0	168	30	0
AZ44ASHLLC	R	MR152004	R1	CY8C4125AXI-483T	121	0	168	30	0
AZ44ASHLLC	R	MR152004	R1	CY8C4125AXI-483T	121	0	288	30	0
AZ100SHZAL	JT	MR153050	R1	CY8CTMA616AA-22T	121	0	96	29	0

Summary for Package Family: TQFP (Pb-Free) 44 records

Sum 3255 0

TQFP (Exposed Pad)

AE120BAGR	M	145010	R2	CYS25G0101DX-AEXC	121	0	288	77	0
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Summary for Package Family: TQFP (Exposed Pad) 1 record

Sum 77 0

TSOP (Pb-free)

ZT48ATAALC	SB	152916	R3	CY62157EV30LL-45ZXIKK	121	0	168	80	0
ZT48ATAALC	SB	152916	R3	CY62157EV30LL-45ZXIKK	121	0	288	78	0



ZT48AIALLC	G	MR151062	R1	CY62167ELL-45ZXIT	121	0	168	30	0
ZT32RADLNC	RA	MR151063	R1	CY62128ELL-45ZXI	121	0	168	30	0
ZT32RAEDLN	RA	MR152005	R1	CY62128EV30LL-45ZXIT	121	0	168	30	0
ZT28R2ABGN	JT	MR152040	R1	CY62256NLL-55ZXAT	121	0	168	30	0
ZT28R2ABGN	JT	MR152040	R1	CY62256NLL-55ZXAT	121	0	168	30	0
ZT48AIALLC	G	MR152050	R1	CY62167ELL-45ZXIT	121	0	168	29	0
ZT32RBBALL	T	MR152062	R1	CG8339AAT	121	0	96	30	0
ZT32RAEDLN	RA	MR153024	R1	CY62128EV30LL-45ZXI	121	0	168	30	0
ZT48AIALLC	G	MR153046	R1	CY62167EV30LL-45ZXI	121	0	168	30	0

Summary for Package Family: TSOP (Pb-Free) 11 records

Sum 427 0

TSOP I (Pb-Free)

ZB32FRAAGL	G	MR143030	R1	FM28V100-TG	121	0	168	30	0
ZB32FRAAGL	G	MR144034	R1	FM28V100-TGTR	121	0	168	30	0
ZB32FRAAGL	G	MR151050	R1	FM28V100-TGTR	121	0	168	30	0
ZB32FRAAGL	G	MR152064	R1	FM28V100-TGTR	121	0	168	30	0
ZB32FRAAGL	G	MR153033	R1	FM28V100-TGTR	121	0	168	30	0
ZB32RHABLN	JT	MR153040	R1	CY62138FV30LL-45ZAXAT	121	0	96	30	0
ZB32RHABLN	JT	MR153040	R1	CY62138FV30LL-45ZAXAT	121	0	168	30	0
ZB32FRAAGL	G	MR154019	R1	FM28V100-TGTR	121	0	168	30	0

Summary for Package Family: TSOP I (Pb-Free) 8 records

Sum 240 0



TSOP II (Pb-Free)

ZW44AAYAGL	RA	143701	R11	CY15B101N-ZS60XA	121	0	96	77	0
ZW44AAYAGL	RA	143701	R11	CY15B101N-ZS60XA	121	0	168	77	0
ZW44AXYLNC	RA	145003	R1	CY62147GE30-45ZSXIES	121	0	168	79	0
ZW44AXYLNC	RA	145003	R1	CY62147GE30-45ZSXIES	121	0	288	78	0
ZW44AXYLNC	RA	150409	R2	CY62147GE30-45ZSXIES	121	0	168	79	0
ZW44AXYLNC	RA	150409	R2	CY62147GE30-45ZSXIES	121	0	288	78	0
ZW44AWALSC	JT	150410	R1	CY7S1041G30-10ZSXIES	121	0	168	80	0
ZW44AWALSC	JT	150410	R1	CY7S1041G30-10ZSXIES	121	0	288	80	0
ZW32AAALRC	T	150412	R1	CY62148G-45ZSXIES	121	0	168	80	0
ZW32AAALRC	T	150412	R1	CY62148G-45ZSXIES	121	0	288	80	0
ZW44AWAZLN	JT	150416	R1	CY7C1041G30-10ZSXIE	121	0	104	85	0
ZW44AWAZLN	JT	150416	R1	CY7C1041G30-10ZSXIE	121	0	176	85	0
ZW44AWAZLN	JT	150416	R2	CY7C1041G30-10ZSXIE	121	0	104	85	0
ZW44AWAZLN	JT	150416	R2	CY7C1041G30-10ZSXIE	121	0	176	85	0
ZW44AWAZLN	JT	150416	R3	CY62147G30-55ZSXIE	121	0	104	85	0
ZW44AWAZLN	JT	150416	R3	CY62147G30-55ZSXIE	121	0	176	85	0
ZW54ARALRC	G	154001	R1	CY7C1061G30-10ZSXI	121	0	168	77	0
ZW44AAELLC	RA	154102	R1	CY62158H-45ZSXIES	121	0	168	80	0
ZW44AAELLC	RA	154102	R1	CY62158H-45ZSXIES	121	0	288	80	0
ZW54ARALRC	G	154908	R1	CY7C1061G30-10ZSXI	121	0	168	77	0
ZW54ARALRC	G	154908	R1	CY7C1061G30-10ZSXI	121	0	288	77	0
ZW44BRXAGL	G	MR151023	R1	FM22L16-55-TG	121	0	168	30	0



ZW444AMLNC	JT	MR151047	R3	CY62157ELL-45ZSXI	121	0	168	45	0
ZW444AMLNC	JT	MR151047	R2	CY62157ELL-45ZSXI	121	0	168	45	0
ZW444AMLNC	JT	MR151047	R1	CY62157ELL-45ZSXI	121	0	168	45	0
ZW44AYAGLC	RA	MR151056	R1	CY7C1041DV33-10ZSXIT	121	0	168	30	0
ZW444AKDLN	JT	MR152039	R1	CY7C1041CV33-12ZSXET	121	0	96	30	0
ZW444AKDLN	JT	MR152039	R1	CY7C1041CV33-12ZSXET	121	0	168	30	0
ZW324FBGL	T	MR152052	R1	CY7C1019CV33-10ZXAT	121	0	96	30	0
ZW324FBGL	T	MR152052	R1	CY7C1019CV33-10ZXAT	121	0	176	30	0
ZW44BRXAGL	G	MR152053	R1	FM22L16-55-TGTR	121	0	168	30	0
ZW44AYAGLC	RA	MR152054	R1	CY7C1041DV33-10ZSXIT	121	0	168	30	0
ZW324GALLC	T	MR153002	R1	CY7C1019DV33-10ZSXI	121	0	168	30	0
ZW44AYAGLC	RA	MR153004	R1	CY7C1041DV33-10ZSXI	121	0	168	30	0
ZW444ALLR	G	MR153049	R1	CY7C1051DV33-10ZSXI	121	0	168	26	0
ZW44AXYAGL	RA	MR154007	R1	CY7C1041LV33-10ZSXIT	121	0	168	30	0
ZW44AXYAGL	RA	MR154007	R1	CY7C1041LV33-10ZSXIT	121	0	288	30	0
ZW44BRXAGL	G	MR154034	R1	FM22L16-55-TG	121	0	168	30	0
ZW44ABYGLC	RA	MR161006	R1A	CY62146EV30LL-45ZSXIT	121	0	168	30	0
ZW44ABYGLC	RA	MR161006	R1A	CY62146EV30LL-45ZSXIT	121	0	288	30	0

Summary for Package Family: TSOP II (Pb-Free) 40 records

Sum 2300 0

TSSOP (Pb-Free)

ZZ0812BGL	T	MR144037	R1	CY2304NZZXC-1T	121	0	168	30	0
ZZ0812BGL	T	MR151028	R1	CY2304NZZXI-1T	121	0	168	30	0



ZZ1620GANC	RA	MR152006	R1	CY22392FXI	121	0	176	30	0
ZZ0812BGL	T	MR152041	R1	CY2304NZZXI-1T	121	0	168	30	0
ZZ2014BGNC	T	MR153001	R1	CY25404ZXI217T	121	0	168	30	0
ZZ2014BGNC	T	MR153001	R1	CY25404ZXI217T	121	0	288	30	0
ZZ1620GBAN	RA	MR153005	R1	CY22394FXCT	121	0	168	30	0
Summary for Package Family: TSSOP (Pb-Free)				7	records				
Sum								210	0



Summary Detail -- TCT Performance Over Time

BUILDKIT	ASSY SITE	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	SS	REJECT	FA	COMMENTS
FBGA (0.75-0.8, 0.3mm, Pb-free)											
BK48MRLZLL	G	150417	R1	CY7C1041G30-10BAJXE	150/-65	0	500	84	0		
BK48MRLZLL	G	150417	R1	CY7C1041G30-10BAJXE	150/-65	0	1000	79	0		
BK48MRLZLL	G	150417	R2	CY7C1041G30-10BAJXE	150/-65	0	500	84	0		
BK48MRLZLL	G	150417	R2	CY7C1041G30-10BAJXE	150/-65	0	1000	84	0		
BK48MRLZLL	G	150417	R3	CY7C1041G30-10BAJXE	150/-65	0	500	85	0		
BK48MRLZLL	G	150417	R3	CY7C1041G30-10BAJXE	150/-65	0	1000	85	0		
BK48MARZLL	RA	151316	R1	CY7C1041G30-10BAJXE	150/-65	0	500	85	0		
BK48MARZLL	RA	151316	R1	CY7C1041G30-10BAJXE	150/-65	0	1000	80	0		
BK48MARZLL	RA	151316	R2	CY7C1041G30-10BAJXE	150/-65	0	500	85	0		
BK48MARZLL	RA	151316	R2	CY7C1041G30-10BAJXE	150/-65	0	1000	85	0		
BK48MARZLL	RA	151316	R3A	CY7C1041G30-10BAJXE	150/-65	0	500	85	0		
BK48MARZLL	RA	151316	R3A	CY7C1041G30-10BAJXE	150/-65	0	1000	85	0		
BK24AAAALC	SB	153701	R1	CY14V101QS-BK108XQES	150/-65	0	500	80	0		
BK24AAAALC	SB	153701	R1	CY14V101QS-BK108XQES	150/-65	0	1000	80	0		
BK24AAAALC	SB	153701	R2	CY14V101QS-BK108XQES	150/-65	0	500	80	0		
BK24AAAALC	SB	153701	R2	CY14V101QS-BK108XQES	150/-65	0	1000	80	0		
BK24AAAALC	SB	153701	R3	CY14V101QS-BK108XQES	150/-65	0	500	80	0		
BK24AAAALC	SB	153701	R3	CY14V101QS-BK108XQES	150/-65	0	1000	80	0		

BK48HAGLL	G	154004	R1	CY14B104NA-BA45XE	150/-65	0	500	85	0
BK48HAGLL	G	154004	R1	CY14B104NA-BA45XE	150/-65	0	1000	80	0
BK48HAGLL	G	154004	R2	CY14B104NA-BA45XE	150/-65	0	500	80	0
BK48HAGLL	G	154004	R2	CY14B104NA-BA45XE	150/-65	0	1000	80	0
BK48HAGLL	G	154004	R3	CY14B104NA-BA45XE	150/-65	0	500	80	0
BK48HAGLL	G	154004	R3	CY14B104NA-BA45XE	150/-65	0	1000	80	0
BK48HAGLL	G	154103	R1	CY14B104NA-BA45XE	150/-65	0	500	85	0
BK48HAGLL	G	154103	R1	CY14B104NA-BA45XE	150/-65	0	1000	80	0
BK48HAGLL	G	154103	R2	CY14B104NA-BA45XE	150/-65	0	500	80	0
BK48HAGLL	G	154103	R2	CY14B104NA-BA45XE	150/-65	0	1000	80	0
BK48HAGLL	G	154103	R3	CY14B104NA-BA45XE	150/-65	0	500	80	0
BK48HAGLL	G	154103	R3	CY14B104NA-BA45XE	150/-65	0	1000	80	0
BK60AAAALL	G	154604	R1	CY14B116N-BA25XIES	150/-65	0	500	80	0
BK60AAAALL	G	154604	R1	CY14B116N-BA25XIES	150/-65	0	1000	80	0
BK60AAAALL	G	154604	R2	CY14B116N-BA25XIES	150/-65	0	500	80	0
BK60AAAALL	G	154604	R2	CY14B116N-BA25XIES	150/-65	0	1000	80	0
BK60AAAALL	G	154604	R3	CY14B116N-BA25XIES	150/-65	0	500	80	0
BK60AAAALL	G	154604	R3	CY14B116N-BA25XIES	150/-65	0	1000	80	0
BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	150/-65	0	500	80	0
BK48REALLC	SB	160703	R1	CY14V101LA-BA45XIKK	150/-65	0	1000	80	0
BK48REALLC	SB	160703	R3	CY14V104NA-BA45XIKK	150/-65	0	500	80	0
BK48REALLC	SB	160703	R3	CY14V104NA-BA45XIKK	150/-65	0	1000	80	0
BK48RFALLC	SB	160703	R4	CY14B104NA-BA25XIKK	150/-65	0	500	80	0



BK48RFALLC	SB	160703	R4	CY14B104NA-BA25XIKK	150/-65	0	1000	80	0
BK48PAALLC	RA	MR151017	R1	CY14V101LA-BA45XIT	150/-65	0	500	30	0
BK48DLALL	G	MR151061	R1	CY62177EV30LL-55BAXIT	150/-65	0	500	30	0
BK48PAALLC	RA	MR152012	R1	CY14V101LA-BA45XI	150/-65	0	500	30	0
BK48DLALL	G	MR152049	R1	CG8208AA	150/-65	0	500	30	0
BK48MABALL	G	MR152063	R1	CY7C1011CV33-10BAJXET	150/-65	0	500	30	0
BK48PAALLC	RA	MR153003	R1	CY14V101LA-BA25XIT	150/-65	0	500	30	0
BK48DLALL	G	MR153011	R1	CY62177EV30LL-55BAXI	150/-65	0	500	30	0
BK48CDGLL	G	MR153043	R1	CY7C1041CV33-10BAXET	150/-65	0	500	30	0
BK48CDGLL	G	MR153043	R1	CY7C1041CV33-10BAXET	150/-65	0	1000	30	0
BK48HAGLL	G	MR153052	R1	CY14B104NA-BA20XIT	150/-65	0	500	30	0
BK48DLALL	G	MR154002	R1	CY62177EV30LL-55BAXIT	150/-65	0	500	30	0
BK48MABALL	G	MR154009	R1	CY7C1011CV33-10BAJXET	150/-65	0	500	30	0
BK48MABALL	G	MR154009	R1	CY7C1011CV33-10BAJXET	150/-65	0	1000	29	0
BK48PAALLC	RA	MR154015	R1	CY14V101LA-BA45XIT	150/-65	0	500	30	0

**Summary for Package Family: FBGA
(0.75-0.8, 0.3mm, Pb-free)**

56 records

Sum

3835 0

FBGA (1.0-1.27)

BB165BZLED	RA	144603	R1	CY7C1460KVE33-167BZC	150/-65	0	1000	80	0
BB165VALLD	S	153605	R3	CY7C1370KV25-200BZC	150/-65	0	500	80	0
BB165VALLD	S	153605	R3	CY7C1370KV25-200BZC	150/-65	0	1000	80	0
BB165VALLD	SB	153605	R2	CY7C1370KV25-167BZC	150/-65	0	500	80	0



BB165VALLD	SB	153605	R2	CY7C1370KV25-167BZC	150/-65	0	1000	80	0
BB165BWALE	G	MR152022	R1	CY7C1520KV18-250BZC	150/-65	0	500	30	0
BB165CWALE	G	MR153047	R1	CY7C1312KV18-333BZC	150/-65	0	500	30	0
BB165BULEC	G	MR154010	R1	CY7C1518KV18-250BZI	150/-65	0	500	30	0

Summary for Package Family: FBGA (1.0-1.27) 8 records

Sum 490 0

FBGA (1.0-1.27, Pb-free)

BW165BZLLC	RA	144603	R2	CY7C1460KV25-167BZXI	150/-65	0	1000	80	0
BW165BZLLC	RA	144603	R3	CY7C1440KV25-250BZXI	150/-65	0	1000	79	0
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	150/-65	0	500	80	0
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	150/-65	0	1000	80	0
BW165TALLD	SB	153602	R1	CY7C1414KV18-250BZXC	150/-65	0	1500	80	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	150/-65	0	500	79	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	150/-65	0	1000	79	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	150/-65	0	1500	76	0
BW165TALLD	SB	153602	R2	CY7C1414KV18-250BZXC	150/-65	0	2000	76	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	150/-65	0	500	77	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	150/-65	0	1000	77	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	150/-65	0	1500	77	0
BW165TALLD	SB	153602	R3	CY7C1414KV18-250BZXC	150/-65	0	2000	77	0
BW165TCLLD	SB	153602	R4	CY7C1514KV18-250BZXC	150/-65	0	500	76	0
BW165TCLLD	SB	153602	R5	CY7C1514KV18-250BZXC	150/-65	0	500	75	0
BW165TCLLD	SB	153602	R5	CY7C1514KV18-250BZXC	150/-65	0	1000	75	0



BW165TCLLD	SB	153602	R5	CY7C1514KV18-250BZXC	150/-65	0	1500	75	0
BW165TCLLD	SB	153602	R5	CY7C1514KV18-250BZXC	150/-65	0	2000	75	0
BW165TBLLD	SB	153602	R6	CY7C1312KV18-250BZXC	150/-65	0	500	77	0
BW165TBLLD	SB	153602	R6	CY7C1312KV18-250BZXC	150/-65	0	1000	77	0
BW165VALLD	SB	153605	R1	CY7C1381KV33-100BZXI	150/-65	0	500	77	0
BW165VALLD	SB	153605	R1	CY7C1381KV33-100BZXI	150/-65	0	1000	77	0
BW165CELLC	G	MR153045	R1	CY7C1414LV18-250BZXC	150/-65	0	500	30	0

**Summary for Package Family: FBGA
(1.0-1.27, Pb-free)**

23 records

Sum 1731 0

VFBGA (0.75-0.8, 0.3mm, Pb-Free)

BZ48ARLZLL	G	150418	R1	CY62147G30-55BVXE	150/-65	0	500	85	0
BZ48ARLZLL	G	150418	R1	CY62147G30-55BVXE	150/-65	0	1000	80	0
BZ48ARLZLL	G	150418	R2	CY62147G30-55BVXE	150/-65	0	500	85	0
BZ48ARLZLL	G	150418	R2	CY62147G30-55BVXE	150/-65	0	1000	85	0
BZ48ARLZLL	G	150418	R3	CY62147G30-55BVXE	150/-65	0	500	85	0
BZ48ARLZLL	G	150418	R3	CY62147G30-55BVXE	150/-65	0	1000	85	0
BZ48A	SB	152202	R1	CY62157EV30LL-45BVXI	150/-65	0	500	80	0
BZ48A	SB	152202	R1	CY62157EV30LL-45BVXI	150/-65	0	1000	80	0
BZ48A	SB	152202	R2	CY62157EV30LL-45BVXI	150/-65	0	500	80	0
BZ48A	SB	152202	R2	CY62157EV30LL-45BVXI	150/-65	0	1000	80	0
BZ48A	SB	152202	R3	CY62157EV30LL-45BVXI	150/-65	0	500	79	0
BZ48A	SB	152202	R3	CY62157EV30LL-45BVXI	150/-65	0	1000	79	0



BZ48EDALLC	SB	152202	R4	CY62167EV30LL-45BXIKK	150/-65	0	500	80	0
BZ48EDALLC	SB	152202	R4	CY62167EV30LL-45BXIKK	150/-65	0	1000	80	0
BZ48EDALLC	SB	152202	R5	CY62167EV30LL-45BXIKK	150/-65	0	500	79	0
BZ48EGALLC	SB	152202	R6	CY62126EV30LL-45BXIKK	150/-65	0	500	80	0
BZ48EGALLC	SB	152202	R6	CY62126EV30LL-45BXIKK	150/-65	0	1000	79	0
BZ48ARHLLC	RA	152405	R1	CY62167GE18-55BVXI	150/-65	0	500	80	0
BZ48ARHLLC	RA	152405	R1	CY62167GE18-55BVXI	150/-65	0	1000	80	0
BZ48ARKLLC	RA	152405	R2	CY7C1061G18-15BV1XI	150/-65	0	500	80	0
BZ48ARKLLC	RA	152405	R2	CY7C1061G18-15BV1XI	150/-65	0	1000	80	0
BZ48ARKLLC	RA	152405	R3	CY7C1061GE30-10BVXI	150/-65	0	500	80	0
BZ48ARKLLC	RA	152405	R3	CY7C1061GE30-10BVXI	150/-65	0	1000	80	0
BZ124AAALC	G	153304	R1	CY8C4248BZI-L489ES	150/-65	0	500	78	0
BZ124AAALC	G	153304	R1	CY8C4248BZI-L489ES	150/-65	0	1000	78	0
BZ124AAALC	G	153304	R2	CY8C4248BZI-L489ES	150/-65	0	500	80	0
BZ124AAALC	G	153304	R2	CY8C4248BZI-L489ES	150/-65	0	1000	80	0
BZ124AAALC	G	153304	R3	CY8C4248BZI-L489ES	150/-65	0	500	80	0
BZ124AAALC	G	153304	R3	CY8C4248BZI-L489ES	150/-65	0	1000	80	0
BZ48ZEALEC	RA	MR152032	R1	CY62157EV30LL-45BVXIT	150/-65	0	500	30	0
BZ48ZEALEC	RA	MR153025	R1	CY62157EV18LL-55BVXIT	150/-65	0	500	30	0
BZ48CFBALL	G	MR153041	R1	CY62157EV30LL-45BVXA	150/-65	0	500	30	0



BZ48CFBALL	G	MR153041	R1	CY62157EV30LL-45BVXA	150/-65	0	1000	30	0
BZ48ZEALEC	RA	MR154006	R1	CY62157EV18LL-55BVXIT	150/-65	0	500	30	0
Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)				34	records				
Sum								2487	0

UFBGA (Pb-free)

BU70AABALE	AC	MR144045	R1	CYTMA568-70BUI58BB	150/-65	0	500	30	0
BU70AAAALC	G	MR152013	R1	CYTMA568-70BUI58ADT	150/-65	0	500	30	0
Summary for Package Family: UFBGA (Pb-free)				2	records				
Sum								60	0

FLIPCHIP BGA (Pb-Free)

FR361BALL	G	150905	R2	CY7C4121KV13-600FCXC	150/-65	0	500	80	0
FR361BALL	G	150905	R2	CY7C4121KV13-600FCXC	150/-65	0	1000	80	0
FR47AAAAAL	G	153703	R1	8F2F1003B	125/-55	0	500	80	0
FR47AAAAAL	G	153703	R1	8F2F1003B	125/-55	0	1000	80	0
FR47AAAAAL	G	153703	R1	8F2F1003B	125/-55	0	1244	80	0
FR47AAAAAL	G	153703	R1	8F2F1003B	125/-55	0	1500	80	0
FR47AAAAAL	G	153703	R2	8F2F1003B	125/-55	0	500	77	0
FR47AAAAAL	G	153703	R2	8F2F1003B	125/-55	0	1000	77	0
FR47AAAAAL	G	153703	R2	8F2F1003B	125/-55	0	1244	77	0
FR47AAAAAL	G	153703	R2	8F2F1003B	125/-55	0	1500	77	0
FR47AAAAAL	G	153703	R3	8F2F1003B	125/-55	0	500	80	0
FR47AAAAAL	G	153703	R3	8F2F1003B	125/-55	0	1000	80	0



FR47AAAAAL	G	153703	R3	8F2F1003B	125/-55	0	1244	80	0
FR47AAAAAL	G	153703	R3	8F2F1003B	125/-55	0	1500	80	0
FR47AAAAAL	G	153703	R4	8F2F1003BC	125/-55	0	500	80	0
FR47AAAAAL	G	153703	R4	8F2F1003BC	125/-55	0	1000	80	0
FR47AAAAAL	G	153703	R4	8F2F1003BC	125/-55	0	1500	80	0
Summary for Package Family: FLIPCHIP BGA (Pb-Free)			17	records					
Sum								1348	0

FLIPCHIP CSP (Pb-Free)

FN76AADRCD	DT	151202	R1	CY8C4248FNI-BL483EST	125/-55	0	500	28	0
FN76AADRCD	DT	151202	R1	CY8C4248FNI-BL483EST	125/-55	0	1000	27	0
FN76AADRCD	DT	151202	R2	CYBL10573-76FNXIEST	125/-55	0	500	27	0
FN76AADRCD	DT	151202	R2	CYBL10573-76FNXIEST	125/-55	0	1000	26	0
FN76AADRCD	DT	151202	R3	CYBL10573-76FNXIEST	125/-55	0	500	27	0
FN60BADRFD	DT	151302	R1	CY62167ESL-55FNXIES	125/-55	0	500	1	0
FN60BADRFD	DT	151302	R1	CY62167ESL-55FNXIES	125/-55	0	1000	1	0
FN60BADRFD	DT	151302	R1A	CY62167ESL-55FNXIES	125/-55	0	500	80	0
FN60BADRFD	DT	151302	R1A	CY62167ESL-55FNXIES	125/-55	0	1000	80	0
FN60BADRFD	DT	151302	R2	CY62167ESL-55FNXIES	125/-55	0	500	1	0
FN60BADRFD	DT	151302	R2	CY62167ESL-55FNXIES	125/-55	0	1000	1	0
FN60BADRFD	DT	151302	R2A	CY62167ESL-55FNXIES	125/-55	0	500	80	0
FN60BADRFD	DT	151302	R2A	CY62167ESL-55FNXIES	125/-55	0	1000	80	0
FN60BADRFD	DT	151302	R3	CY62167ESL-55FNXIES	125/-55	0	500	1	0



FN60BADRFD	DT	151302	R3A	CY62167ESL-55FNXIES	125/-55	0	500	80	0
FN60BADRFD	DT	151302	R3A	CY62167ESL-55FNXIES	125/-55	0	1000	80	0
FN16AADRFD-WAFER	DT	152203	R1	8F44302AC	125/-55	0	500	77	0
FN16AADRFD-WAFER	DT	152203	R1	8F44302AC	125/-55	0	1000	77	0
FN16AADRFD	DT	152203	R1A	8F44302AC	125/-55	0	500	79	0
FN16AADRFD	DT	152203	R1A	8F44302AC	125/-55	0	1000	79	0
FN16AADRFD	DT	152203	R2	8F44302AC	125/-55	0	500	77	0
FN16AADRFD	DT	152203	R2	8F44302AC	125/-55	0	1000	77	0
FN16AADRFD	DT	152203	R2A	8F44302AC	125/-55	0	500	80	0
FN16AADRFD	DT	152203	R2A	8F44302AC	125/-55	0	1000	79	0
FN16AADRFD	DT	152203	R3	8F44302AC	125/-55	0	500	77	0
FN16AADRFD	DT	152203	R3	8F44302AC	125/-55	0	1000	77	0
FN16AADRFD	DT	152203	R3A	8F44302AC	125/-55	0	500	79	0
FN16AADRFD	DT	152203	R3A	8F44302AC	125/-55	0	1000	79	0
FN25AAGRCD	G	154802	R1	CY8C4246FNI-D412EST	125/-55	0	500	80	0
FN25AAGRCD	G	154802	R1	CY8C4246FNI-D412EST	125/-55	0	1000	80	0
FN25AAGRCD	G	154802	R2	CY8C4246FNI-D412EST	125/-55	0	500	80	0
FN25AAGRCD	G	154802	R2	CY8C4246FNI-D412EST	125/-55	0	1000	80	0
FN25AAGRCD	G	154802	R3	CY8C4246FNI-D412EST	125/-55	0	500	80	0
FN25AAGRCD	G	154802	R3	CY8C4246FNI-D412EST	125/-55	0	1000	80	0

Summary for Package Family:
FLIPCHIP CSP (Pb-Free)
Sum

34 records

2037 0



QFN (COL, 0.6mm, Saw Type, Pb-free)

LG16AEAAAL	MB	MR141059	R1	CY8C20236A-24LKXI	150/-65	0	500	30	0
LG16ABAALL	L	MR151060	R1	CY8C20236A-24LKXAT	150/-65	0	500	29	0
LG16AQAAAL	G	MR153008	R1	CG7602AAT	150/-65	0	500	30	0
LG16ABAALL	L	MR161002	R1	CY8C20236A-24LKXAT	150/-65	0	500	30	0
Summary for Package Family:			4	records					
QFN (COL, 0.6mm, Saw Type, Pb-free)									
Sum									119 0

QFN (Saw Type, Pb-Free)

LQ48ADAAAL	G	142308	R1	CY8CTMA443-48LQIES2	150/-65	0	500	80	0
LQ48ADAAAL	G	142308	R1	CY8CTMA443-48LQIES2	150/-65	0	1000	80	0
LQ56AAAARC	G	144405	R6	CY8C4247LQI-BL483	150/-65	0	1000	80	0
LQ32QAAAAL	G	144602	R1	CY8C20467-24LQXI	150/-65	0	500	80	0
LQ32QAAAAL	G	144602	R1	CY8C20467-24LQXI	150/-65	0	1000	80	0
LQ16ABARC	G	144602	R2	CY8CMBR3108-LQXI	150/-65	0	500	80	0
LQ16ABARC	G	144602	R2	CY8CMBR3108-LQXI	150/-65	0	1000	79	0
LQ32QAAAAL	G	144909	R1	CY8C20446A-24LQXI	150/-65	0	500	80	0
LQ32QAAAAL	G	144909	R1	CY8C20446A-24LQXI	150/-65	0	1000	80	0
LN28ABAALC	UT	150907	R1	CYTMA525A-28LNI18ZZES	150/-65	0	500	80	0
LN28ABAALC	UT	150907	R1	CYTMA525A-28LNI18ZZES	150/-65	0	1000	80	0
LN28ABAALC	UT	150907	R2	CYTMA525A-28LNI18ZZES	150/-65	0	500	80	0
LN28ABAALC	UT	150907	R2	CYTMA525A-28LNI18ZZES	150/-65	0	1000	80	0
LN28ABAALC	UT	150907	R3	CYTMA525A-28LNI18ZZES	150/-65	0	500	79	0

LN28ABAALC	UT	150907	R3	CYTMA525A-28LNI18ZZES	150/-65	0	1000	79	0
LQ48AGAALC	RA	151008	R1	CYTT214032-48LQI36ES	150/-65	0	500	80	0
LQ48AGAALC	RA	151008	R1	CYTT214032-48LQI36ES	150/-65	0	1000	80	0
LQ48AGAALC	RA	151008	R2	CYTT214032-48LQI36ES	150/-65	0	500	80	0
LQ56AAAALC	RA	151203	R1	CY8C4248LQI-BL483ES	150/-65	0	500	80	0
LQ56AAAALC	RA	151203	R1	CY8C4248LQI-BL483ES	150/-65	0	1000	80	0
LQ56AAAALC	RA	151203	R4	CYBL10562-56LQXI	150/-65	0	500	25	0
LQ56AAAALC	RA	151203	R4	CYBL10562-56LQXI	150/-65	0	1000	25	0
LQ56AAAALC	RA	151203	R5	CYBL10462-56LQXI	150/-65	0	500	25	0
LQ56AAAALC	RA	151203	R5	CYBL10462-56LQXI	150/-65	0	1000	25	0
LQ56AAAALC	RA	151203	R6	CYBL10563-56LQXIES	150/-65	0	500	25	0
LQ56AAAALC	RA	151203	R6	CYBL10563-56LQXIES	150/-65	0	1000	24	0
LQ56AAAALC	RA	151204	R1	CY8C4248LQI-BL483ES	150/-65	0	500	80	0
LQ56AAAALC	RA	151204	R1	CY8C4248LQI-BL483ES	150/-65	0	1000	80	0
LQ24AABALC	RA	151303	R1	CY8CMBR3106S2-LQXI	150/-65	0	500	80	0
LQ24AABALC	RA	151303	R1	CY8CMBR3106S2-LQXI	150/-65	0	1000	80	0
LT56BVAAAL	G	151313	R1	CY8C24894-24LTXA	150/-65	0	500	85	0
LT56BVAAAL	G	151313	R1	CY8C24894-24LTXA	150/-65	0	1000	80	0
LT56BVAAAL	G	151313	R2	CY8C24894-24LTXA	150/-65	0	500	80	0
LT56BVAAAL	G	151313	R2	CY8C24894-24LTXA	150/-65	0	1000	80	0
LT56BVAAAL	G	151313	R3	CY8C24894-24LTXA	150/-65	0	500	80	0
LT56BVAAAL	G	151313	R3	CY8C24894-24LTXA	150/-65	0	1000	80	0
LQ56BEAALC	RA	151402	R2	CYTT214032-56LQI44	150/-65	0	500	80	0



LQ56BEAALC	RA	151402	R2	CYTT214032-56LQI44	150/-65	0	1000	80	0
LQ48AGAALC	RA	151402	R4	CYTT214032-48LQI36ES	150/-65	0	500	80	0
LQ48AGAALC	RA	151402	R4	CYTT214032-48LQI36ES	150/-65	0	1000	80	0
LQ48AGAALC	RA	151402	R5	CYTT214032-48LQI36ES	150/-65	0	500	80	0
LT48EQAAAL	G	152902	R4	CYWUSB6953-48LTXC	150/-65	0	500	30	0
LT48EQAAAL	G	152902	R4A	CYWUSB6953-48LTXC	150/-65	0	500	30	0
LT48EQAAAL	G	152902	R5	CYWUSB6953-48LTXC	150/-65	0	500	30	0
LT48EQAAAL	G	152902	R5A	CYWUSB6953-48LTXC	150/-65	0	500	30	0
LT48EQAAAL	G	152902	R6	CYWUSB6953-48LTXC	150/-65	0	500	30	0
LT48EQAAAL	G	152902	R6A	CYWUSB6953-48LTXC	150/-65	0	500	30	0
LT48DDBARC	G	152903	R1	CY27410FLTXI	150/-65	0	500	80	0
LT48DDBARC	G	152903	R1	CY27410FLTXI	150/-65	0	1000	80	0
LQ16ABARC	G	152915	R1	CY8CMBR3108-LQXI	150/-65	0	500	80	0
LQ16ABARC	G	152915	R1	CY8CMBR3108-LQXI	150/-65	0	1000	80	0
LQ16AAAALC	RA	153503	R1	CY8CMBR3108-LQXI	150/-65	0	500	80	0
LQ16AAAALC	RA	153503	R1	CY8CMBR3108-LQXI	150/-65	0	1000	80	0
LQ48AAAAAL	RA	153504	R1	CY8CTMA140-48LQI-09	150/-65	0	500	80	0
LQ48AAAAAL	RA	153504	R1	CY8CTMA140-48LQI-09	150/-65	0	1000	80	0
LQ48AAAAAL	RA	153504	R2	CY8CTMA140-48LQI-09	150/-65	0	500	80	0
LQ48AAAAAL	RA	153504	R2	CY8CTMA140-48LQI-09	150/-65	0	1000	80	0
LT88BBAPRC	UT	154702	R1	CS8481AA	150/-65	0	500	80	0
LT88BBAPRC	UT	154702	R1	CS8481AA	150/-65	0	1000	80	0
LT88BBAPRC	UT	154702	R2	CS8481AA	150/-65	0	500	80	0



LT88BBAPRC	UT	154702	R2	CS8481AA	150/-65	0	1000	80	0
LT88BBAPRC	UT	154702	R3	CS8482AA	150/-65	0	500	79	0
LT88BBAPRC	UT	154702	R3	CS8482AA	150/-65	0	1000	79	0
LQ48AGAALC	RA	155008	R1	CYTMA445A-48LQI36AB	150/-65	0	500	80	0
LQ48AGAALC	RA	155008	R1A	CYTMA445A-48LQI36AB	150/-65	0	500	80	0
LQ48AGAALC	RA	155008	R1A	CYTMA445A-48LQI36AB	150/-65	0	1000	80	0
LQ56AAAALC	RA	155008	R3	CY8C4247LQI-BL473	150/-65	0	500	80	0
LQ56AAAALC	RA	155008	R3A	CY8C4247LQI-BL473	150/-65	0	500	80	0
LQ56AAAALC	RA	155008	R3A	CY8C4247LQI-BL473	150/-65	0	1000	80	0
LQ48AGAALC	RA	155108	R1	CYTMA445A-48LQI36ZZ	150/-65	0	500	80	0
LQ48AGAALC	RA	155108	R1	CYTMA445A-48LQI36ZZ	150/-65	0	1000	80	0
LQ48AGAALC	RA	155108	R2	CYTMA445A-48LQI36ZZ	150/-65	0	500	80	0
LQ48AGAALC	RA	155108	R2	CYTMA445A-48LQI36ZZ	150/-65	0	1000	80	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	150/-65	0	500	80	0
LQ48AGAALC	RA	155108	R3	CYTMA445A-48LQI36ZZ	150/-65	0	1000	80	0
LQ24AABALC	RA	160407	R1	CY8CMBR4013-LQXI	150/-65	0	500	80	0
LQ24AABALC	RA	160407	R1	CY8CMBR4013-LQXI	150/-65	0	1000	80	0
LQ48AGAALC	RA	160610	R1	CYTMA445A-48LQI36ZZ	150/-65	0	500	80	0
LQ48AGAALC	RA	160610	R1	CYTMA445A-48LQI36ZZ	150/-65	0	1000	79	0
LQ48AGAALC	RA	160610	R2	CYTMA445A-48LQI36ZZ	150/-65	0	500	79	0
LQ48AGAALC	RA	160610	R2	CYTMA445A-48LQI36ZZ	150/-65	0	1000	79	0
LQ48AGAALC	RA	160610	R3	CYTMA445A-48LQI36ZZ	150/-65	0	500	80	0
LQ48AGAALC	RA	160610	R3	CYTMA445A-48LQI36ZZ	150/-65	0	1000	80	0



LQ48AGAALC	RA	160610	R4	CYTMA445A-48LQI36ZZ	150/-65	0	500	79	0
LQ48AGAALC	RA	160610	R4	CYTMA445A-48LQI36ZZ	150/-65	0	1000	79	0
LT48AQAALC	G	MR141052	R1	CY8C20636A-24LTXI	150/-65	0	500	29	0
LT48AQAALC	G	MR141052	R1	CY8C20636A-24LTXI	150/-65	0	1000	29	0
LQ24AQAALC	G	MR142001	R1	CG7717AM	150/-65	0	500	30	0
LT48AQAALC	G	MR142006	R1	CY8C20636A-24LTXI	150/-65	0	500	28	0
LT48AQAALC	G	MR142006	R1	CY8C20636A-24LTXI	150/-65	0	1000	28	0
LT32BAABGL	RA	MR151009	R1	CG7558AAT	150/-65	0	1000	30	0
LQ44AHAARC	G	MR151045	R1	CYTMA445A5-44LQI28AB	150/-65	0	500	30	0
LQ40AAAALC	RA	MR152001	R1	CY8C4125LQI-483T	150/-65	0	500	30	0
LT32BAABGL	RA	MR152002	R1	CG7558AAT	150/-65	0	500	30	0
LT32BAABGL	RA	MR152002	R1	CG7558AAT	150/-65	0	1000	30	0
LQ48AGAALC	RA	MR152003	R1	CG8364AM	150/-65	0	500	30	0
LQ16ABARC	G	MR152008	R1	CY8CMBR3108-LQXIT	150/-65	0	500	30	0
LQ56AAAALC	RA	MR152009	R4	CYBL10563-56LQXI	150/-65	0	500	80	0
LQ56AAAALC	RA	MR152009	R4	CYBL10563-56LQXI	150/-65	0	1000	80	0
LQ16ABBALC	UT	MR152011	R1	CG8356AAT	150/-65	0	500	30	0
LT48AQAAL	G	MR152043	R1	CP7658BT	150/-65	0	500	30	0
LT40ABAALC	G	MR152051	R1	CYRF6936-40LTXC	150/-65	0	500	30	0
LQ40AABALC	RA	MR153009	R1	CY8C4245LQI-483T	150/-65	0	500	30	0
LT32BAABGL	RA	MR153010	R1	CG7272AAT	150/-65	0	500	30	0
LT32BAABGL	RA	MR153010	R1	CG7272AAT	150/-65	0	1000	30	0
LT56YAAALC	G	MR153026	R1	CG7786AAT	150/-65	0	500	30	0



LQ16ABBALC	UT	MR153034	R1	CY8C4014LQI-421T	150/-65	0	282	30	0
LQ16ABBALC	UT	MR153034	R1	CY8C4014LQI-421T	150/-65	0	1000	30	0
LQ40AABALC	RA	MR154017	R1	CY8C4245LQI-483T	150/-65	0	500	30	0
LQ56AAAALC	RA	MR154018	R1	CG8370AM	150/-65	0	500	30	0
LT68GAAALC	G	MR154027	R1	CY8C5868LTI-LP038	150/-65	0	500	30	0
Summary for Package Family: QFN (Saw Type, Pb-Free)			111	records					
Sum								7038	0
QFN (Punch Type,Pb-Free)									
LY56DGAGL	L	MR161004	R1	CY8CTMA120-56LFXAT	150/-65	0	500	30	0
Summary for Package Family: QFN (Punch Type,Pb-Free)			1	record					
Sum								30	0
QFN (Punch Type, Wettable Flank, Pb-Free)									
LW56DGAZGL	L	MR151034	R1	CP7598ATT	150/-65	0	500	30	0
LW56DGAZGL	L	MR152037	R1	CP7598ATT	150/-65	0	500	30	0
LW56DGAZGL	L	MR153021	R1	CP7598ATT	150/-65	0	500	30	0
LW56DGAZGL	L	MR161005	R1	CP7598ATT	150/-65	0	500	30	0
Summary for Package Family: QFN (Punch Type, Wettable Flank, Pb-Free)			4	records					
Sum								120	0
DFN, 0.8mm Thickness (Saw Type)									
LH08DBAALC	UT	150502	R1	CY15B104Q-LHXIES	150/-65	0	500	80	0
LH08DBAALC	UT	150502	R1	CY15B104Q-LHXIES	150/-65	0	1000	80	0
LH14AAAARC	G	152007	R1	CYPD2103-14LHXIES	150/-65	0	500	80	0



LH14AAAARC	G	152007	R1	CYPD2103-14LHXIES	150/-65	0	1000	80	0
LH14AAAARC	G	152007	R2	CYPD2103-14LHXIES	150/-65	0	500	80	0
LH14AAAARC	G	152007	R2	CYPD2103-14LHXIES	150/-65	0	1000	80	0
LH14AAAARC	G	152007	R3	CYPD2103-14LHXIES	150/-65	0	500	79	0
LH14AAAARC	G	152007	R3	CYPD2103-14LHXIES	150/-65	0	1000	79	0
LH14ABAALC	UT	153601	R1	CYPD2103-14LHXI	150/-65	0	500	80	0
LH14ABAALC	UT	153601	R2	CYPD2103-14LHXI	150/-65	0	500	80	0
LH14ABAALC	UT	153601	R3	CYPD2103-14LHXI	150/-65	0	500	80	0
LH08DAAALL	UT	MR141057	R1	FM25H20-DGTR	150/-65	0	500	30	0
LH08DAAALL	UT	MR142035	R1	FM25H20-DGTR	150/-65	0	500	30	0
LH08DAAALL	UT	MR143025	R1	FM25H20-DGTR	150/-65	0	500	30	0
LH08DAAALL	UT	MR144038	R1	FM25H20-DGTR	150/-65	0	500	30	0
LH08ABAALL	UT	MR151049	R1	FM25L16B-DGTR	150/-65	0	500	30	0
LH08ABAALL	UT	MR151058	R1	FM25L16B-DGTR	150/-65	0	500	30	0
LH08ABAALL	UT	MR152044	R1	FM25L16B-DGTR	150/-65	0	500	30	0
LH08ABAALL	UT	MR152060	R1	FM25L16B-DGTR	150/-65	0	500	30	0
LH08ABAALL	UT	MR153018	R1	FM25L16B-DGTR	150/-65	0	500	30	0
LH08ABAALL	UT	MR153035	R1	FM25L16B-DGTR	150/-65	0	500	30	0

Summary for Package Family: DFN (Pb-Free) 21 records

Sum 1178 0



PDIP (Pb-Free)

PZ283AAARC	LP	151901	R1	CY8C29466-24PXI	150/-65	0	500	80	0
PZ283AAARC	LP	151901	R2	CY8C27443-24PXI	150/-65	0	500	80	0
PZ283AAARC	LP	151901	R3	CY8C24423A-24PXI	150/-65	0	500	80	0
PZ283AAARC	LP	151901	R4	CY8C29466-24PXI	150/-65	0	500	80	0
PZ283AAARC	LP	151901	R5	CY8C27443-24PXI	150/-65	0	500	80	0
PZ283AAARC	LP	151901	R6	CY8C24423A-24PXI	150/-65	0	500	80	0
PZ28BDAALL	LP	MR143042	R1	FM1608B-PG	150/-65	0	500	30	0
PZ28BDAALL	LP	MR144054	R1	FM1608B-PG	150/-65	0	500	30	0
PZ28BDAALL	LP	MR151025	R1	FM1608B-PG	150/-65	0	500	30	0
PZ083AAALL	UT	MR151042	R1	FM25V20-PG	150/-65	0	500	30	0
PZ183DPGNC	RA	MR152007	R1	CY7C63813-PXC	150/-65	0	500	30	0
PZ083AAALL	UT	MR152015	R1	FM25V20-PG	150/-65	0	500	30	0
PZ083AAALL	UT	MR152055	R1	FM25V20-PG	150/-65	0	500	30	0
PZ183DPGNC	RA	MR153006	R1	CS6632AF	150/-65	0	500	29	0
PZ183DPGNC	RA	MR153006	R1	CS6632AF	150/-65	0	1000	29	0
PZ083AAALL	UT	MR153013	R1	FM25V20-PG	150/-65	0	500	30	0

Summary for Package Family: PDIP (Pb-Free) 16 records

Sum 778 0

PLCC (Pb-Free)

JZ32RBGAN	M	MR151029	R1	CY7B991V-5JXIT	150/-65	0	500	30	0
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Summary for Package Family: PLCC (Pb-Free) 1 record

Sum 30 0



QSOP (Pb-Free)

SQ2414ACGN	JT	MR141044	R1	CY7C63823-QXC	150/-65	0	1000	30	0
SQ2414ACGN	JT	MR151027	R1	CY7C63823-QXC	150/-65	0	500	30	0
SQ2414ACGN	JT	MR153031	R1	CY7C63823-QXC	150/-65	0	500	30	0

Summary for Package Family: QSOP (Pb-Free) 3 records

Sum 90 0

SOIC (Pb Free)

SZ815PBAAN	RA	150403	R4A	CY15B256Q-SXA	150/-65	0	500	77	0
SZ815PBAAN	RA	150403	R4A	CY15B256Q-SXA	150/-65	0	1000	77	0
SZ815PBAAN	RA	150403	R4B	CY15B256Q-SXA	150/-65	0	500	80	0
SZ163AAALC	RA	150407	R1	CY14V101PS-SF108XIES	150/-65	0	500	80	0
SZ163AAALC	RA	150407	R1	CY14V101PS-SF108XIES	150/-65	0	1000	80	0
SZ324AALSC	JT	150411	R1	CY62148G-45SXIES	150/-65	0	500	80	0
SZ324AALSC	JT	150411	R1	CY62148G-45SXIES	150/-65	0	1000	80	0
SZ820AAGLC	UT	150502	R2	CY15B104Q-SXI	150/-65	0	500	80	0
SZ820AAGLC	UT	150502	R2	CY15B104Q-SXI	150/-65	0	1000	80	0
SZ820AAGLC	UT	150502	R3	CY15B104Q-SXI	150/-65	0	500	80	0
SZ820AAGLC	UT	150502	R3	CY15B104Q-SXI	150/-65	0	1000	80	0
SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	150/-65	0	500	80	0
SZ163GAALC	UT	151502	R1	CY14B101Q3A-SFXI	150/-65	0	1000	80	0
SZ163GAALC	UT	151502	R2	CY14B101Q3A-SFXI	150/-65	0	500	80	0
SZ163GAALC	UT	151502	R2	CY14B101Q3A-SFXI	150/-65	0	1000	80	0
SZ163GAALC	UT	151502	R3	CY14B101Q3A-SFXI	150/-65	0	500	80	0



SZ163GAALC	UT	151502	R3	CY14B101Q3A-SFXI	150/-65	0	1000	80	0
SZ1615IALC	UT	152303	R1	CYPD1132-16SXQ	150/-65	0	500	80	0
SZ1615IALC	UT	152303	R1	CYPD1132-16SXQ	150/-65	0	1000	80	0
SZ1615IALC	UT	152303	R2	CYPD1132-16SXQ	150/-65	0	500	80	0
SZ1615IALC	UT	152303	R2	CYPD1132-16SXQ	150/-65	0	1000	80	0
SZ1615IALC	UT	152303	R3	CYPD1132-16SXQ	150/-65	0	500	80	0
SZ1615IALC	UT	152303	R3	CYPD1132-16SXQ	150/-65	0	1000	80	0
SZ815CGAAS	M	152801	R1	CY2305CSXA-1H	150/-65	0	500	85	0
SZ815CGAAS	M	152801	R2	CY2305CSXA-1H	150/-65	0	500	85	0
SZ815CGAAS	M	152801	R3	CY2305CSXA-1H	150/-65	0	500	85	0
SZ815CGAAS	M	152801	R4	CY2305CSXA-1H	150/-65	0	500	85	0
SZ815CGAAS	M	152801	R4	CY2305CSXA-1H	150/-65	0	1000	80	0
SZ815CGAAS	M	152801	R5	CY2305CSXA-1H	150/-65	0	500	80	0
SZ815CGAAS	M	152801	R5	CY2305CSXA-1H	150/-65	0	1000	80	0
SZ815CGAAS	M	152801	R6	CY2305CSXA-1H	150/-65	0	500	80	0
SZ815CGAAS	M	152801	R6	CY2305CSXA-1H	150/-65	0	1000	80	0
SZ815PAAAN	RA	153504	R4	FM25V02A-G	150/-65	0	500	79	0
SZ815PAAAN	RA	153504	R4	FM25V02A-G	150/-65	0	1000	79	0
SZ163AAALC	RA	154002	R1	CY14B101Q3A-SFXI	150/-65	0	500	79	0
SZ163AAALC	RA	154002	R1	CY14B101Q3A-SFXI	150/-65	0	1000	79	0
SZ163AAALC	RA	154002	R1	CY14B101Q3A-SFXI	150/-65	0	1500	79	0
SZ163AAALC	RA	154002	R2	CY14B101Q3A-SFXI	150/-65	0	500	80	0
SZ163AAALC	RA	154002	R2	CY14B101Q3A-SFXI	150/-65	0	1000	80	0



SZ163AAALC	RA	154002	R2	CY14B101Q3A-SFXI	150/-65	0	1500	80	0
SZ163AAALC	RA	154002	R3	CY14B101Q3A-SFXI	150/-65	0	500	80	0
SZ163AAALC	RA	154002	R3	CY14B101Q3A-SFXI	150/-65	0	1000	80	0
SZ163AAALC	RA	154002	R3	CY14B101Q3A-SFXI	150/-65	0	1500	80	0
SZ28ABGAS	AC	MR134004	R1	STK12C68-SF45	150/-65	0	500	30	0
SZ28ABGAS	AC	MR141023	R1	STK12C68-SF45	150/-65	0	500	30	0
SZ141ARAGL	UT	MR141037	R1	FM31256-G1	150/-65	0	1000	30	0
SZ141ARAGL	UT	MR141037	R1	FM31256-G1	150/-65	0	500	30	0
SW815JRALL	UT	MR141038	R1	FM24CL16B-GTR	150/-65	0	500	30	0
SW815JRALL	UT	MR141038	R1	FM24CL16B-GTR	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR141061	R1	FM28V020-SGTR	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR142046	R1	FM28V020-SGTR	150/-65	0	1000	30	0
SZ141ARAGL	UT	MR142055	R1	FM31256-GTR	150/-65	0	500	29	0
SZ141ARAGL	UT	MR142055	R1	FM31256-GTR	150/-65	0	1000	29	0
SW815JRALL	UT	MR142056	R1	FM24CL16B-GTR	150/-65	0	500	30	0
SW815JRALL	UT	MR142056	R1	FM24CL16B-GTR	150/-65	0	1000	30	0
SW815JRALL	UT	MR143026	R1	FM24C16B-GTR	150/-65	0	500	30	0
SW815JRALL	UT	MR143026	R1	FM24C16B-GTR	150/-65	0	1000	30	0
SZ141ARAGL	UT	MR143028	R1	FM31256-GTR	150/-65	0	500	30	0
SZ141ARAGL	UT	MR143028	R1	FM31256-GTR	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR143039	R1	FM28V020-SGTR	150/-65	0	1000	30	0
SZ28ABGAS	AC	MR143043	R1	STK12C68-SF45I	150/-65	0	500	30	0
SW815JRALL	UT	MR144020	R1	FM24C16B-GTR	150/-65	0	500	30	0



SW815JRALL	UT	MR144020	R1	FM24C16B-GTR	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR144033	R1	FM28V020-SGTR	150/-65	0	1000	30	0
SZ141ARAGL	UT	MR144040	R1	FM31256-GTR	150/-65	0	500	30	0
SZ815HRALL	LP	MR151024	R1	FM25V01-GTR	150/-65	0	1000	30	0
SZ28ABGAS	AC	MR151026	R1	STK12C68-SF45	150/-65	0	500	30	0
SZ815JRALL	UT	MR151030	R1	FM25CL64B-GTR	150/-65	0	1000	30	0
SZ141ARAGL	UT	MR151031	R1	FM31256-G	150/-65	0	500	30	0
SZ141ARAGL	UT	MR151031	R1	FM31256-G	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR151032	R1	FM28V020-SGTR	150/-65	0	500	30	0
SZ28BNRALL	UT	MR151032	R1	FM28V020-SGTR	150/-65	0	1000	30	0
SZ815CGAAS	M	MR151035	R1	CY2305CSXA-1HT	150/-65	0	1000	29	0
SW815JRALL	UT	MR151038	R1	FM24CL16B-GTR	150/-65	0	500	30	0
SZ141ARAGL	UT	MR151039	R1	FM31256-GTR	150/-65	0	500	30	0
SZ141ARAGL	UT	MR151039	R1	FM31256-GTR	150/-65	0	1000	30	0
SW815JRALL	UT	MR151040	R1	FM25C160B-GATR	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR151041	R1	FM28V020-SGTR	150/-65	0	500	30	0
SZ28BNRALL	UT	MR151041	R1	FM28V020-SGTR	150/-65	0	1000	30	0
SW815JRALL	UT	MR151043	R1	FM24CL64B-GTR	150/-65	0	500	30	0
SZ32451LLC	JT	MR151046	R1	CY62148ELL-55SXI	150/-65	0	500	45	0
SZ32451LLC	JT	MR151046	R3	CY62148ELL-55SXI	150/-65	0	500	45	0
SZ32451LLC	JT	MR151046	R2	CY62148ELL-55SXI	150/-65	0	500	45	0
SZ815HRALL	LP	MR151052	R1	FM25V01-GTR	150/-65	0	500	30	0
SZ183CPANC	RA	MR152010	R1	CY7C63813-SXC	150/-65	0	500	29	0



SZ183CPANC	RA	MR152010	R1	CY7C63813-SXC	150/-65	0	1000	29	15	MR152020-1T2	Cut Wedge CAR#201542012
SW815JRALL	UT	MR152014	R1	FM25C160B-GATR	150/-65	0	500	30	0		
SZ815JRALL	UT	MR152016	R1	FM25CL64B-GTR	150/-65	0	500	30	0		
SW815JRALL	UT	MR152017	R1	FM24CL16B-GTR	150/-65	0	500	30	0		
SW815JRALL	UT	MR152017	R1	FM24CL16B-GTR	150/-65	0	1000	30	0		
SZ815CGAAS	M	MR152026	R1	CY2305CSXA-1HT	150/-65	0	500	28	0		
SZ815CGAAS	M	MR152026	R1	CY2305CSXA-1HT	150/-65	0	1000	28	0		
SZ815HRALL	LP	MR152029	R1	FM25V01-GTR	150/-65	0	500	30	0		
SW815JRALL	UT	MR152036	R1	FM25C160B-GATR	150/-65	0	500	30	0		
SW815JRALL	UT	MR152036	R1	FM25C160B-GATR	150/-65	0	1000	29	0		
SZ1615GAAL	T	MR152038	R1	CY8C20055-24SXIT	150/-65	0	500	30	0		
SZ815HRALL	LP	MR152042	R1	FM25V01-GTR	150/-65	0	500	30	0		
SZ815HRALL	LP	MR152042	R1	FM25V01-GTR	150/-65	0	1000	30	0		
SW815JRALL	UT	MR152045	R1	FM24C64B-GTR	150/-65	0	500	30	0		
SW815JRALL	UT	MR152045	R1	FM24C64B-GTR	150/-65	0	1000	30	0		
SZ820AAAGL	UT	MR152046	R1	FM25V20-G	150/-65	0	500	30	0		
SZ28BNRALL	UT	MR152047	R1	FM28V020-SGTR	150/-65	0	500	28	0		
SZ141ARAGL	UT	MR152048	R1	FM31256-GTR	150/-65	0	500	30	0		
SZ32451BLN	JT	MR152061	R1	CY7C53120E2-10SXI	150/-65	0	500	30	0		
SW815JRALL	UT	MR153014	R1	FM24CL64B-GTR	150/-65	0	500	30	0		
SW815JRALL	UT	MR153014	R1	FM24CL64B-GTR	150/-65	0	1000	30	0		
SZ141ARAGL	UT	MR153016	R1	FM31256-GTR	150/-65	0	500	30	0		
SZ815JRALL	UT	MR153017	R1	FM25CL64B-GATR	150/-65	0	500	30	0		



SZ815JRALL	UT	MR153017	R1	FM25CL64B-GATR	150/-65	0	1000	30	0
SW815JRALL	UT	MR153019	R1	FM24CL16B-GTR	150/-65	0	500	30	0
SW815JRALL	UT	MR153020	R1	FM25C160B-GATR	150/-65	0	500	30	0
SZ815CGAAS	M	MR153022	R1	CY2305CSXA-1HT	150/-65	0	500	30	0
SZ1615GAAL	T	MR153051	R1	CY8C20055-24SXIT	150/-65	0	500	30	0
SZ820ABASC	UT	MR153053	R1	FM25V20A-G	150/-65	0	500	30	0
SZ815CGAAS	M	MR154005	R1	CY2305CSXA-1HT	150/-65	0	500	29	0
SZ815CGAAS	M	MR161001	R1	CY2305CSXA-1HT	150/-65	0	500	29	0
SZ815CGAAS	M	MR161001	R1	CY2305CSXA-1HT	150/-65	0	1000	29	0

Summary for Package Family: SOIC (Pb Free) 117 records

Sum 5699 15

SOJ (Pb-Free)

VZ44ADALSC	JT	150411	R2	CY7C1041GE30-10VXI	150/-65	0	500	80	0
VZ44ADALSC	JT	150411	R2	CY7C1041GE30-10VXI	150/-65	0	1000	80	0
VZ364AALSC	JT	150411	R3	CY7S1049GE30-10VXI	150/-65	0	500	80	0
VZ364AALSC	JT	150411	R3	CY7S1049GE30-10VXI	150/-65	0	1000	80	0
VZ32314CLL	JT	MR144053	R1	CY7C1018DV33-10VXIT	150/-65	0	500	30	0
VZ32314CLL	JT	MR144053	R1	CY7C1018DV33-10VXIT	150/-65	0	1000	30	0
VZ444ADLNC	JT	MR151048	R1	CY7C1041D-10VXI	150/-65	0	500	45	0
VZ444ADLNC	JT	MR151048	R2	CY7C1041D-10VXI	150/-65	0	500	45	0
VZ32314LLC	JT	MR151048	R3	CY7C1018DV33-10VXI	150/-65	0	500	45	0
VZ32314LLC	JT	MR151048	R4	CY7C1018DV33-10VXI	150/-65	0	500	45	0
VZ32314CLL	JT	MR151057	R1	CY7C1018DV33-10VXIT	150/-65	0	500	30	0



VZ32314CLL	JT	MR151057	R1	CY7C1018DV33-10VXIT	150/-65	0	1000	30	0
VZ32420DLL	JT	MR152031	R1	CY7C1019DV33-10VXI	150/-65	0	500	30	0
VZ32420DLL	JT	MR153048	R1	CY7C1019DV33-10VXI	150/-65	0	500	30	0
Summary for Package Family: SOJ (Pb-Free)			14	records					
Sum								680	0
SNC (Pb-Free)									
SY2831BHN	JT	MR151059	R1	CG7261ATT	150/-65	0	500	30	0
SY2831BCLN	JT	MR152033	R1	CY62256VNLL-70SNXIT	150/-65	0	500	30	0
SY2831BHN	JT	MR153044	R1	CY62256NLL-55SNXET	150/-65	0	500	30	0
SY2831BHN	JT	MR154013	R1	CY62256NLL-55SNXET	150/-65	0	500	30	0
SY2831BHN	JT	MR154013	R1	CY62256NLL-55SNXET	150/-65	0	1000	30	0
Summary for Package Family: SNC (Pb-Free)			5	records					
Sum								150	0
SSOP (Pb-Free)									
SP282BAAAL	RA	144001	R4A	CY8C4245PVA-482ES	150/-65	0	500	85	0
SP282BAAAL	RA	144001	R4A	CY8C4245PVA-482ES	150/-65	0	1000	80	0
SP282BAAAL	RA	144001	R5A	CY8C4245PVS-482ES	150/-65	0	500	85	0
SP282BAAAL	RA	144001	R5A	CY8C4245PVS-482ES	150/-65	0	1000	80	0
SP282BAAAL	RA	144001	R6A	CY8C4125PVS-482ES	150/-65	0	500	85	0
SP282BAAAL	RA	144001	R6A	CY8C4125PVS-482ES	150/-65	0	1000	85	0
SP282ABAGN	RA	153504	R3	CY8C24494-24PVXI	150/-65	0	500	79	0
SP282ABAGN	RA	153504	R3	CY8C24494-24PVXI	150/-65	0	1000	79	0

SP282EAALC	RA	153607	R1	CY8C4246PVI-D412ES	150/-65	0	500	80	0
SP282EAALC	RA	153607	R1	CY8C4246PVI-D412ES	150/-65	0	1000	80	0
SP282ABGNC	RA	155008	R2	CY8C21534-24PVXI	150/-65	0	508	80	0
SP282ABGNC	RA	155008	R2	CY8C21534-24PVXI	150/-65	0	1000	80	0
SP282ABGNC	RA	155008	R2A	CY8C21534-24PVXI	150/-65	0	500	78	0
SP282ABGNC	RA	155008	R2A	CY8C21534-24PVXI	150/-65	0	1000	78	0
SP563DBCGN	JT	MR144055	R1	CY7C68013A-56PVXCT	150/-65	0	1000	30	0
SP282ABGNC	RA	MR151022	R1	CY7C64215-28PVXI	150/-65	0	500	29	0
SP282ABGNC	RA	MR151022	R1	CY7C64215-28PVXI	150/-65	0	1000	29	0
SP2024CAGL	M	MR151033	R1	CY8C21334-24PVXAT	150/-65	0	500	30	0
SP2024CAGL	M	MR151033	R1	CY8C21334-24PVXAT	150/-65	0	1000	29	0
SP563DBGNC	JT	MR151044	R1	CY7C66113C-PVXC	150/-65	0	500	45	0
SP483ABANC	JT	MR151044	R2	CY7C63413C-PVXC	150/-65	0	500	45	0
SP483ABANC	JT	MR151044	R3	CY7C63413C-PVXC	150/-65	0	500	45	0
SP2822BGL	M	MR152027	R1	CY8C21534-12PVXET	150/-65	0	500	28	0
SP2822BGL	M	MR152027	R1	CY8C21534-12PVXET	150/-65	0	1000	28	0
SP483JABLL	JT	MR152028	R1	CY8C21645-12PVXET	150/-65	0	500	30	0
SP282ABGNC	RA	MR152030	R1	CY7C64215-28PVXCT	150/-65	0	500	30	0
SP282ABGNC	RA	MR152030	R1	CY7C64215-28PVXCT	150/-65	0	1000	30	0
SP282ABGNC	RA	MR153007	R1	CY7C64215-28PVXCT	150/-65	0	500	30	0
SP2024CAGL	M	MR153023	R1	CY8C21334-24PVXAT	150/-65	0	500	29	0
SP2024CAGL	M	MR153023	R1	CY8C21334-24PVXAT	150/-65	0	1000	29	0
SP2822BGL	M	MR154001	R1	CY8C21534-12PVXET	150/-65	0	500	29	0



SP2822BGL	M	MR154001	R1	CY8C21534-12PVXET	150/-65	0	1000	29	0
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Summary for Package Family: SSOP (Pb-Free) 32 records

Sum 1708 0

TQFP (Pb-Free)

AY64GAAASC	G	144805	R1	CY8C4247AZI-M485ES	150/-65	0	1000	80	0
AZ48CAAASC	JT	145009	R1	CY8C4246AZI-M443ES	150/-65	0	500	80	0
AZ48CAAASC	JT	145009	R1	CY8C4246AZI-M443ES	150/-65	0	1000	80	0
AZ48CAAASC	JT	145009	R2	CY8C4246AZI-M443ES	150/-65	0	500	79	0
AZ48CAAASC	JT	145009	R2	CY8C4246AZI-M443ES	150/-65	0	1000	79	0
AZ48CAAASC	JT	145009	R3	CY8C4246AZI-M443ES	150/-65	0	500	79	0
AZ48CAAASC	JT	145009	R3	CY8C4246AZI-M443ES	150/-65	0	1000	79	0
AZ44ASHLLC	R	151008	R5	CY8C42452AXI-483	150/-65	0	500	79	0
AZ44ASHLLC	R	151008	R5	CY8C42452AXI-483	150/-65	0	1000	79	0
AZ44ASHLLC	R	151403	R1	CY8C42452AXI-483	150/-65	0	500	79	0
AZ64KAAASC	JT	151704	R1	CY8C4247AXI-M485ES	150/-65	0	500	80	0
AZ64KAAASC	JT	151704	R1	CY8C4247AXI-M485ES	150/-65	0	1000	77	0
AZ64KAAASC	JT	151704	R2	CY8C4247AXI-M485ES	150/-65	0	500	78	0
AZ64KAAASC	JT	151704	R2	CY8C4247AXI-M485ES	150/-65	0	1000	78	0
AZ64KAAASC	JT	151704	R3	CY8C4247AXI-M485ES	150/-65	0	500	80	0
AZ64KAAASC	JT	151704	R3	CY8C4247AXI-M485ES	150/-65	0	1000	80	0
AZ100RZLLC	G	152402	R1	CY7C1370KVE33-167AXI	150/-65	0	500	80	0
AZ100RZLLC	G	152402	R1	CY7C1370KVE33-167AXI	150/-65	0	1000	80	0
AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	150/-65	0	500	80	0



AZ100RZLLC	G	152602	R1	CY7C1370KVE33-167AXI	150/-65	0	1000	80	0
AZ100RZLLC	G	152602	R2	CY7C1383KVE33-133AXI	150/-65	0	500	79	0
AZ100RZLLC	G	152602	R3	CY7C1370KV33-250AXC	150/-65	0	500	80	0
AZ128EAZAS	G	152603	R1A	CYAT81688-128AS88ES	150/-65	0	500	84	0
AZ128EAZAS	G	152603	R1A	CYAT81688-128AS88ES	150/-65	0	1000	79	0
AZ128EAZAS	G	152603	R2	CYAT81688-128AS88ES	150/-65	0	500	82	0
AZ128EAZAS	G	152603	R2	CYAT81688-128AS88ES	150/-65	0	1000	81	0
AZ128EAZAS	G	152603	R3	CYAT81688-128AS88ES	150/-65	0	500	85	0
AZ128EAZAS	G	152603	R3	CYAT81688-128AS88ES	150/-65	0	1000	85	0
AZ100SJAAL	R	152605	R1	CYAT81688-100AS71ES	150/-65	0	500	80	0
AZ100SJAAL	R	152605	R1	CYAT81688-100AS71ES	150/-65	0	1000	80	0
AZ100SJAAL	R	152607	R1	CYAT81688-100AS71ES	150/-65	0	500	85	0
AZ100SJAAL	R	152607	R1	CYAT81688-100AS71ES	150/-65	0	1000	80	0
AY64GAAASC	G	153201	R1	CY8C4248AZI-L485ES	150/-65	0	500	80	0
AY64GAAASC	G	153201	R1	CY8C4248AZI-L485ES	150/-65	0	1000	80	0
AZ48BAAASC	T	153305	R1	CY8C4247AZI-L423ES	150/-65	0	500	80	0
AZ48BAAASC	T	153305	R1	CY8C4247AZI-L423ES	150/-65	0	1000	80	0
AZ48BAAASC	T	153305	R2	CY8C4247AZI-L433ES	150/-65	0	500	80	0
AZ48BAAASC	T	153305	R2	CY8C4247AZI-L433ES	150/-65	0	1000	80	0
AZ48BAAASC	T	153305	R3	CY8C4247AZI-L433ES	150/-65	0	500	80	0
AZ48BAAASC	T	153305	R3	CY8C4247AZI-L433ES	150/-65	0	1000	80	0
AZ100RMBLN	R	153503	R3	CY7C1370D-167AXC	150/-65	0	500	80	0
AZ100RMBLN	R	153503	R3	CY7C1370D-167AXC	150/-65	0	1000	80	0



AZ32GXGAN	G	MR143052	R1	CY29940AXI	150/-65	0	500	25	0
AZ100RUCLN	JT	MR144059	R1	CY7C1350G-200AXCT	150/-65	0	1000	30	0
AZ64EXGALC	G	MR151010	R1	CY7C53150-20AXI	150/-65	0	500	30	0
AZ44ASAGRC	G	MR151011	R1	CY8C22545-24AXI	150/-65	0	500	30	0
AZ100RUCLN	JT	MR151064	R1	CG7685AA	150/-65	0	500	30	0
AZ44ASHLLC	R	MR152004	R1	CY8C4125AXI-483T	150/-65	0	500	30	0
AZ44ASAGRC	G	MR153012	R1	CY8C22545-24AXI	150/-65	0	500	30	0
AZ100SLAAL	R	MR153042	R1	CY8CTMA1036AS-33	150/-65	0	500	30	0
AZ100SLAAL	R	MR153042	R1	CY8CTMA1036AS-33	150/-65	0	1000	29	0
AZ100SHZAL	JT	MR153050	R1	CY8CTMA616AA-22T	150/-65	0	500	29	0
AZ100SHZAL	JT	MR153050	R1	CY8CTMA616AA-22T	150/-65	0	1000	27	0
AZ44ASHLLC	R	MR154020	R1	CY8C4245AXI-473	150/-65	0	500	30	0

Summary for Package Family: TQFP (Pb-Free) 54 records

Sum 3716 0

TSOP (Pb-free)

ZT48AVAALC	SB	152916	R1	CY62167EV30LL-45ZXIKK	150/-65	0	500	80	0
ZT48AVAALC	SB	152916	R1	CY62167EV30LL-45ZXIKK	150/-65	0	1000	80	0
ZT48AVAALC	SB	152916	R2	CY62167DV30LL-55ZXIKK	150/-65	0	500	80	0
ZT48AVAALC	SB	152916	R2	CY62167DV30LL-55ZXIKK	150/-65	0	1000	80	0
ZT48ATAALC	SB	152916	R3	CY62157EV30LL-45ZXIKK	150/-65	0	500	79	0
ZT48ATAALC	SB	152916	R3	CY62157EV30LL-45ZXIKK	150/-65	0	1000	78	0
ZT48AIALLC	G	MR151062	R1	CY62167ELL-45ZXIT	150/-65	0	500	29	0
ZT32RADLNC	RA	MR151063	R1	CY62128ELL-45ZXI	150/-65	0	500	30	0



ZT32RADLNC	RA	MR151063	R1	CY62128ELL-45ZXI	150/-65	0	1000	30	0
ZT32RAEDLN	RA	MR152005	R1	CY62128EV30LL-45ZXIT	150/-65	0	500	30	0
ZT28R2ABGN	JT	MR152040	R1	CY62256NLL-55ZXAT	150/-65	0	500	30	0
ZT48AIALLC	G	MR152050	R1	CY62167ELL-45ZXIT	150/-65	0	500	30	0
ZT32RBBALL	T	MR152062	R1	CG8339AAT	150/-65	0	500	30	0
ZT32RAEDLN	RA	MR153024	R1	CY62128EV30LL-45ZXI	150/-65	0	500	30	0
ZT48AIALLC	G	MR153046	R1	CY62167EV30LL-45ZXI	150/-65	0	500	30	0
ZT32RADLNC	RA	MR154003	R1	CY62128ELL-45ZXIT	150/-65	0	500	30	0
ZT32RBBALL	T	MR154008	R1	CY62128ELL-45ZXA	150/-65	0	500	30	0
ZT32RBBALL	T	MR154008	R1	CY62128ELL-45ZXA	150/-65	0	1000	29	0

Summary for Package Family: TSOP (Pb-free) 18 records

Sum 835 0

TSOP- Reverse (Pb-free)

ZY28R2CLN	JT	MR154016	R1	CY62256NLL-70ZRXIT	150/-65	0	500	30	0
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Summary for Package Family: TSOP- Reverse (Pb-free) 1 records

Sum 30 0

TSOP I (Pb-Free)

ZB32FRAAGL	G	MR144034	R1	FM28V100-TGTR	150/-65	0	500	30	0
ZB32FRAAGL	G	MR151050	R1	FM28V100-TGTR	150/-65	0	500	30	0
ZB32FRAAGL	G	MR152064	R1	FM28V100-TGTR	150/-65	0	500	30	0
ZB32FRAAGL	G	MR153033	R1	FM28V100-TGTR	150/-65	0	500	29	0
ZB32RHABLN	JT	MR153040	R1	CY62138FV30LL-45ZAXAT	150/-65	0	500	29	0



ZB32RHABL	JT	MR153040	R1	CY62138FV30LL-45ZAXAT	150/-65	0	1000	29	0
ZB32FRAAGL	G	MR154019	R1	FM28V100-TGTR	150/-65	0	500	30	0
ZB32FRAAGL	G	MR154019	R1	FM28V100-TGTR	150/-65	0	1000	30	0
Summary for Package Family: TSOP I (Pb-Free)				8	records				

Sum 237 0

TSOP II (Pb-Free)

ZW44AAYAGL	RA	143701	R11A	CY15B101N-ZS60XA	150/-65	0	500	77	0
ZW44AAYAGL	RA	143701	R11B	CY15B101N-ZS60XA	150/-65	0	500	77	0
ZW44AXYLNC	RA	145003	R1G	CY62147G30-45ZSXI	150/-65	0	500	80	0
ZW44AXYLNC	RA	145003	R1G	CY62147G30-45ZSXI	150/-65	0	1000	79	0
ZW44AXYLNC	RA	145003	R2	CY62147GE30-45ZSXI	150/-65	0	500	80	0
ZW44AXYLNC	RA	145003	R2	CY62147GE30-45ZSXI	150/-65	0	1000	80	0
ZW44AXYLNC	RA	150409	R3	CY7C1041G-10ZSXIES	150/-65	0	500	80	0
ZW44AXYLNC	RA	150409	R3	CY7C1041G-10ZSXIES	150/-65	0	1000	80	0
ZW44AXYLNC	RA	150409	R4	CY7C1041G30-10ZSXIES	150/-65	0	500	79	0
ZW44AXYLNC	RA	150409	R4	CY7C1041G30-10ZSXIES	150/-65	0	1000	79	0
ZW44AXYLNC	RA	150409	R5	CY62147GE30-45ZSXI	150/-65	0	500	80	0
ZW44AWALSC	JT	150410	R1	CY7S1041G30-10ZSXIES	150/-65	0	500	80	0
ZW44AWALSC	JT	150410	R1	CY7S1041G30-10ZSXIES	150/-65	0	1000	80	0
ZW44AWALSC	JT	150410	R2	CY621472G30-45ZSXI	150/-65	0	500	80	0
ZW44AWALSC	JT	150410	R2	CY621472G30-45ZSXI	150/-65	0	1000	80	0
ZW44AWALSC	JT	150410	R3	CY7S1049GE30-10ZSXI	150/-65	0	500	80	0
ZW44AWALSC	JT	150410	R3	CY7S1049GE30-10ZSXI	150/-65	0	1000	80	0



ZW32AAALRC	T	150412	R1	CY62148G-45ZSXIES	150/-65	0	500	80	0
ZW32AAALRC	T	150412	R1	CY62148G-45ZSXIES	150/-65	0	1000	80	0
ZW32AAALRC	T	150412	R2	CY62148G-45ZSXI	150/-65	0	500	80	0
ZW32AAALRC	T	150412	R2	CY62148G-45ZSXI	150/-65	0	1000	80	0
ZW32AAALRC	T	150412	R3	CY62148G30-45ZSXI	150/-65	0	500	80	0
ZW32AAALRC	T	150412	R3	CY62148G30-45ZSXI	150/-65	0	1000	80	0
ZW44AWAZLN	JT	150416	R1	CY7C1041G30-10ZSXE	150/-65	0	500	84	0
ZW44AWAZLN	JT	150416	R1	CY7C1041G30-10ZSXE	150/-65	0	1000	79	0
ZW44AWAZLN	JT	150416	R2	CY7C1041G30-10ZSXE	150/-65	0	500	84	0
ZW44AWAZLN	JT	150416	R2	CY7C1041G30-10ZSXE	150/-65	0	1000	84	0
ZW44AWAZLN	JT	150416	R3	CY62147G30-55ZSXE	150/-65	0	500	85	0
ZW44AWAZLN	JT	150416	R3	CY62147G30-55ZSXE	150/-65	0	1000	85	0
ZW44ABYAGL	RA	150904	R1	CY62146EV30LL-45ZSXI	150/-65	0	500	79	0
ZW44ABYAGL	RA	150904	R1	CY62146EV30LL-45ZSXI	150/-65	0	1000	79	0
ZW54ARALRC	G	154001	R1	CY7C1061G30-10ZSXI	150/-65	0	500	77	0
ZW54ARALRC	G	154001	R1A	CY7C1061G30-10ZSXI	150/-65	0	500	37	0
ZW54ARALRC	G	154001	R2	CY7C1061G30-10ZSXI	150/-65	0	500	77	0
ZW54ARALRC	G	154001	R3	CY7C1061G30-10ZSXI	150/-65	0	500	77	0
ZW44AAELLC	RA	154102	R1	CY62158H-45ZSXIES	150/-65	0	500	80	0
ZW44AAELLC	RA	154102	R1	CY62158H-45ZSXIES	150/-65	0	1000	80	0
ZW44AAELLC	RA	154102	R2	CY7C1051H30-10ZSXIES	150/-65	0	500	80	0
ZW44AAELLC	RA	154102	R2	CY7C1051H30-10ZSXIES	150/-65	0	1000	80	0
ZW44AAELLC	RA	154102	R3	CY7C1051H30-10ZSXIES	150/-65	0	500	80	0



ZW44AAELLC	RA	154102	R3	CY7C1051H30-10ZSXIES	150/-65	0	1000	80	0
ZW54ARALRC	G	154908	R1	CY7C1061G30-10ZSXI	150/-65	0	500	77	0
ZW54ARALRC	G	154908	R1	CY7C1061G30-10ZSXI	150/-65	0	1000	77	0
ZW54ARALRC	G	154908	R2	CY7C1061G30-10ZSXI	150/-65	0	500	77	0
ZW54ARALRC	G	154908	R2	CY7C1061G30-10ZSXI	150/-65	0	1000	77	0
ZW54ARALRC	G	154908	R3	CY7C1061G18-15ZSXI	150/-65	0	500	77	0
ZW54ARALRC	G	154908	R3	CY7C1061G18-15ZSXI	150/-65	0	1000	77	0
ZW44BRXAGL	G	MR151023	R1	FM22L16-55-TG	150/-65	0	500	30	0
ZW444AMLNC	JT	MR151047	R3	CY62157ELL-45ZSXI	150/-65	0	500	45	0
ZW444AMLNC	JT	MR151047	R1	CY62157ELL-45ZSXI	150/-65	0	500	45	0
ZW444AMLNC	JT	MR151047	R2	CY62157ELL-45ZSXI	150/-65	0	500	45	0
ZW44AYAGLC	RA	MR151056	R1	CY7C1041DV33-10ZSXIT	150/-65	0	500	30	0
ZW444AKDLN	JT	MR152039	R1	CY7C1041CV33-12ZSXET	150/-65	0	500	30	0
ZW324FBGL	T	MR152052	R1	CY7C1019CV33-10ZXAT	150/-65	0	500	30	0
ZW44BRXAGL	G	MR152053	R1	FM22L16-55-TGTR	150/-65	0	500	30	0
ZW44AYAGLC	RA	MR152054	R1	CY7C1041DV33-10ZSXIT	150/-65	0	500	30	0
ZW324GALLC	T	MR153002	R1	CY7C1019DV33-10ZSXI	150/-65	0	500	30	0
ZW44AYAGLC	RA	MR153004	R1	CY7C1041DV33-10ZSXI	150/-65	0	500	30	0
ZW444ALLR	G	MR153049	R1	CY7C1051DV33-10ZSXI	150/-65	0	500	30	0
ZW44AXYAGL	RA	MR154007	R1	CY7C1041LV33-10ZSXIT	150/-65	0	500	30	0
ZW44AXYAGL	RA	MR154007	R1	CY7C1041LV33-10ZSXIT	150/-65	0	1000	28	0
ZW444AKDLN	JT	MR154011	R1	CY7C1041CV33-12ZSXET	150/-65	0	500	30	0
ZW444AKDLN	JT	MR154011	R1	CY7C1041CV33-12ZSXET	150/-65	0	1000	30	0



ZW324FBGL	T	MR154012	R1	CY7C1019CV33-10ZXAT	150/-65	0	500	29	0
ZW324FBGL	T	MR154012	R1	CY7C1019CV33-10ZXAT	150/-65	0	1000	29	0
ZW44BRXAGL	G	MR154034	R1	FM22L16-55-TG	150/-65	0	500	30	0
ZW44ABYGLC	RA	MR161006	R1A	CY62146EV30LL-45ZSXIT	150/-65	0	500	30	0
ZW44ABYGLC	RA	MR161006	R1A	CY62146EV30LL-45ZSXIT	150/-65	0	1000	30	0

Summary for Package Family: TSOP II (Pb-Free) 68 records

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TSSOP (Pb-Free)

ZZ0812BGL	T	MR151028	R1	CY2304NZZXI-1T	150/-65	0	500	30	0
ZZ0812BGL	T	MR151028	R1	CY2304NZZXI-1T	150/-65	0	1000	29	0
ZZ1620GANC	RA	MR152006	R1	CY22392FXI	150/-65	0	500	30	0
ZZ0812BGL	T	MR152041	R1	CY2304NZZXI-1T	150/-65	0	500	30	0
ZZ2014BGNC	T	MR153001	R1	CY25404ZXI217T	150/-65	0	500	30	0
ZZ1620GBAN	RA	MR153005	R1	CY22394FXCT	150/-65	0	500	30	0
ZZ1620GBAN	RA	MR153005	R1	CY22394FXCT	150/-65	0	1000	30	0
ZZ1620GANC	RA	MR154031	R1	CY22392ZXC-396T	150/-65	0	500	30	0

Summary for Package Family: TSSOP (Pb-Free) 8 records

Sum 239 0



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Rev.	ECN No.	Orig. of Change	Description of Change
**	5272063	JYF	Initial spec release.