



2015 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 2015. 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 25-20001) 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	# Failed	PPM	Failure Mode
LL65	50,230	0	0	None
R9	85,584	0	0	None
C9	143,616	0	0	None
130nm TI F-RAM	296,640	0	0	None
R95	359,688	0	0	None
S8	3,131,619	0	0	None
Grand Total	4,067,376	0	0	None



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
CM018G	60,784	0	Insufficient	None
R7	62,424	0	Insufficient	None
S4	93,840	0	Insufficient	None
R8	154,000	0	Insufficient	None
R42	188,000	0	29	None
LL65	432,452	0	12	None
130nm TI F-RAM	509,171	0	11	None
R9	512,220	0	11	None
R95	718,988	0	7	None
C9	866,552	0	6	None
S8	1,075,882	0	5	None
Grand Total	4,674,312	0	1.2	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
S4	0.7 eV	80,000	0	31.25	0	None
S8	0.7 eV	667,456	0	3.38	0	None
130nm TI F-RAM	1.4 eV	237,000	0	0.64	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 Jедec 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.

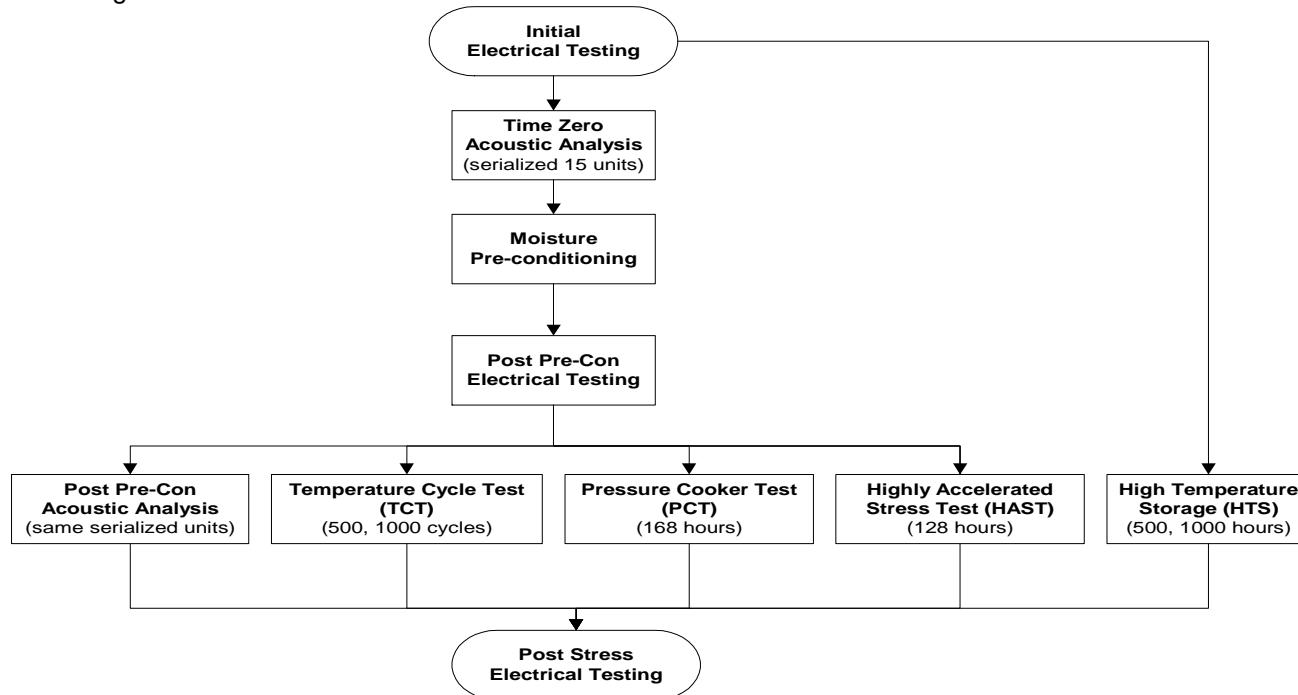


Figure 1. Cypress Package Reliability Stress Flow



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)	1,228	0	0	None
FBGA (1.0-1.27)	120	0	0	None
FBGA (1.0-1.27, Pb-free)	1,109	0	0	None
FCBGA	154	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	521	0	0	None
UFBGA (Pb-free)	188	0	0	None
FLIPCHIP CSP (Pb-Free)	164	0	0	None
PDIP (Pb-Free)	205	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	884	0	0	None
QFN (Saw Type, Pb-Free)	8,781	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	265	0	0	None
DFN, 0.8mm Thickness (Saw Type)	154	0	0	None
QSOP (Pb-Free)	60	0	0	None
SNC (Pb-Free)	60	0	0	None
SOIC (Pb Free)	5,150	0	0	None
SOJ (Pb-Free)	428	0	0	None
SSOP (Pb-Free)	1,475	0	0	None
TQFP (Pb-Free)	3,474	0	0	None
TSOP (Pb-free)	457	0	0	None
TSOP I (Pb-Free)	208	0	0	None
TSOP II (Pb-Free)	2,299	0	0	None
TSSOP (Pb-Free)	270	0	0	None
PLCC (Pb-Free)	11	0	0	None
Grand Total	27,665	0	0	None



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 / 85% RH minimum power dissipation, for a minimum of 128 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)	600	0	0	None
FBGA (1.0-1.27)	146	0	0	None
FBGA (1.0-1.27, Pb-free)	990	0	0	None
FCCGA	25	0	0	None
VFBGA (0.75-0.8, 0.3mm)	60	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	405	0	0	None
UFBGA (Pb-free)	80	0	0	None
PDIP (Pb-Free)	119	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	415	0	0	None
QFN (Saw Type, Pb-Free)	2,415	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	90	0	0	None
QFN (Punch Type, Pb-Free)	25	0	0	None
DFN (0.8mm Thickness, Saw Type)	93	0	0	None
QSOP (Pb-Free)	90	0	0	None
SNC (Pb-Free)	30	0	0	None
SOIC (Pb Free)	1,971	0	0	None
SOJ (Pb-Free)	209	0	0	None
SSOP (Pb-Free)	522	0	0	None
TQFP (Pb-Free)	1,738	0	0	None
TSOP (Pb-free)	419	0	0	None
TSOP I (Pb-Free)	90	0	0	None
TSOP II (Pb-Free)	795	0	0	None
TSSOP (Pb-Free)	180	0	0	None
PLCC (Pb-Free)	160	0	0	None
Grand Total	11,667	0	0	None



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)	443	0	0	None
FBGA (1.0-1.27)	119	0	0	None
FBGA (1.0-1.27, Pb-free)	1,286	0	0	None
FCBGA	393	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	830	0	0	None
UFBGA (Pb-free)	534	0	0	None
FLIPCHIP CSP (Pb-Free)	1,098	0	0	None
PDIP (Pb-Free)	210	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	1,058	0	0	None
QFN (Saw Type, Pb-Free)	9,173	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	90	0	0	None
DFN, 0.8mm Thickness (Saw Type)	693	0	0	None
QSOP (Pb-Free)	60	0	0	None
SNC (Pb-Free)	29	0	0	None
SOIC (Pb Free)	5,857	0	0	None
SOJ (Pb-Free)	595	0	0	None
SSOP (Pb-Free)	1,480	0	0	None
TQFP (Pb-Free)	4,008	0	0	None
TSOP (Pb-free)	603	0	0	None
TSOP I (Pb-Free)	179	0	0	None
TSOP II (Pb-Free)	2,689	0	0	None
TSSOP (Pb-Free)	388	0	0	None
PLCC (Pb-Free)	26	0	0	None
Grand Total	31,841	0	0	None



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)	682	0	0	None
FBGA (1.0-1.27)	330	0	0	None
FBGA (1.0-1.27, Pb-free)	398	0	0	None
VFBGA (0.75-0.8, 0.3mm, Pb-Free)	179	0	0	None
UFBGA (Pb-free)	90	0	0	None
FLIPCHIP CSP (Pb-Free)	168	0	0	None
PDIP (Pb-Free)	501	0	0	None
QFN (COL, 0.6mm, Saw Type, Pb-free)	1,244	0	0	None
QFN (Saw Type, Pb-Free)	2,035	0	0	None
QFN (Punch Type, Wettable Flank, Pb-Free)	89	0	0	None
DFN , 0.8mm Thickness (Saw Type)	385	0	0	None
QSOP (Pb-Free)	89	0	0	None
SNC (Pb-Free)	58	0	0	None
SOIC (Pb Free)	3,700	0	0	None
SOJ (Pb-Free)	656	0	0	None
SSOP (Pb-Free)	1,347	0	0	None
TQFP (Pb-Free)	1,434	0	0	None
TSOP (Pb-free)	780	0	0	None
TSOP I (Pb-Free)	270	0	0	None
TSOP II (Pb-Free)	2,093	0	0	None
TSSOP (Pb-Free)	597	0	0	None
PLCC (Pb-Free)	171	0	0	None
Grand Total	17,296	0	0	None



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).

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

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

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

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:

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



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.

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

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

$$RH_j = 85\% \left[\frac{2026.10}{2347.26} \right] = 73.4\%$$

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

Similarly, for 140 °C HAST testing,

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

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

$$RH_j = 85\% \left[\frac{2710.92}{3116.76} \right] = 73.9\%$$

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



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.

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

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 ($T_{mold} = 170 \text{ }^{\circ}\text{C}$) and the minimum temperature reached during temperature cycling , (T_{min}).

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

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.

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

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
- [4] S.S. Manson, thermal Stress and Low-Cycle Fatigue, (Robert Krieger : Malabar, Florida), 1981.



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.

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

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: 3/29/2014

TO: 03/29/2015

Summary Detail -- EFR Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
LL65												
	MPD	144804	R1	CY62167GE30-45BVXIES	125	1.44	96	96	927	0		
	MPD	144804	R2	CY62167G30-45BVXI	125	1.44	96	96	695	0		
Summary for Technology: LL65				2	records							
	Sum											1,622
C9												
	MPD	141303	R1	CY7C1049DV33-10ZSXIJK	150	3.77	48	48	1498	0		
	MPD	143704	R2	CY7C1021DV33-10VXIKJ	150	3.78	48	48	1494	0		
Summary for Technology: C9				2	records							
	Sum											2,992
S8												
	MPD	114501	R4A	CY14E116N-Z45XI	125	5.5	96	96	456	0		
	MPD	114501	R4B	CY14B116N-Z45XI	125	5.5	96	96	468	0		
	MPD	114501	R4C	CY14E116S-BZ45XI	125	5.5	96	96	411	0		
	MPD	114501	R4D	CY14B116S-BZ45XI	125	3.3	96	96	349	0		



MPD	114501	R6	CY14B116N-Z45XI	125	3.3	96	96	388	0
MPD	114501	R6A	CY14E116S-BZ45XI	125	5.5	96	96	320	0
MPD	114501	R6B	CY14E116S-BZ45XI	125	3.3	96	96	300	0
MPD	114501	R6C	CY14E116N-Z45XI	125	5.5	96	96	289	0
MPD	114501	R7H	CY14B116S-BZ45XIES	125	3.3	96	96	84	0
PSD	134903	R1_Split 1	CY8C4245AXI4-483	150	2.07	48	48	1188	0
PSD	134903	R1_Split 2	CY8C4245AXI4-483	150	2.07	48	48	312	0
PSD	134903	R1_Split 3	CY8C4245AXI4-483	150	2.07	48	48	28	0
PSD	134904	R1	CY8C4245AXI8-483	150	2.07	72	72	26	0
PSD	134904	R1_Split 1	CY8C4245AXI8-483	150	2.07	48	48	1184	0
PSD	134904	R1_Split 2	CY8C4245AXI8-483	150	2.07	48	48	313	0
PSD	141001	R1_Split 1	CYONSFN3050A-100AZA	150	2.07	48	48	1788	0
PSD	141001	R1_Split 2	CYONSFN3050A-100AZA	150	2.07	48	48	1612	0
PSD	141001	R2_Split 1	CYONSFN3050A-100AZA	150	2.07	48	48	1723	0
PSD	141001	R2_Split 2	CYONSFN3050A-100AZA	150	2.07	48	48	1677	0
PSD	141001	R3_Split 1	CYONSFN3050A-100AZA	150	2.07	48	48	1732	0
PSD	141001	R3_Split 2	CYONSFN3050A-100AZA	150	2.07	48	48	1668	0
PSD	140404	R1_Split 1	CY8CMBR31085CP-LQXIKA	150	2.07	48	48	558	0
PSD	140404	R1_Split 2	CY8CMBR31085CP-LQXIKA	150	2.07	48	48	384	0
PSD	140404	R1_Split 3	CY8CMBR31085CP-LQXIKA	150	2.07	48	48	385	0



PSD	140404	R1_Split 4	CY8CMBR31085CP-LQXIKA	150	2.07	48	48	177	0
PSD	140504	R1A_Split 1	CYTMA445A-48LQI36ZZES	150	2.07	48	48	1097	0
PSD	140504	R1A_Split 2	CYTMA445A-48LQI36ZZES	150	2.07	48	48	453	0
PSD	140506	R1_Split 1	CY8CTMA400-48LQIES2	150	5.5	48	48	450	0
PSD	140506	R1_Split 2	CY8CTMA400-48LQIES2	150	5.5	48	48	429	0
PSD	140506	R1_Split 3	CY8CTMA400-48LQIES2	150	5.5	48	48	429	0
PSD	140506	R1_Split 4	CY8CTMA400-48LQIES2	150	5.5	48	48	429	0
PSD	140506	R1_Split 5	CY8CTMA400-48LQIES2	150	5.5	48	48	450	0
PSD	140506	R1_Split 6	CY8CTMA400-48LQIES2	150	5.5	48	48	450	0
PSD	140506	R1_Split 7	CY8CTMA400-48LQIES2	150	5.5	48	48	368	0
PSD	140506	R2	CY8CMBR31085-LQXIKG	150	2.07	72	72	591	0
PSD	140506	R2_Split 2	CY8CMBR31085-LQXIKG	150	2.07	48	48	594	0
PSD	140506	R2_Split 3	CY8CMBR31085-LQXIKG	150	2.07	48	48	594	0
PSD	140506	R2_Split 4	CY8CMBR31085-LQXIKG	150	2.07	48	48	594	0
PSD	140506	R2_Split 5	CY8CMBR31085-LQXIKG	150	2.07	48	48	594	0
PSD	140506	R2_Split 6	CY8CMBR31085-LQXIKG	150	2.07	48	48	49	0
PSD	140908	R1_Split 1	CY8CTMA443-48LQIES2	150	5.5	48	48	451	0
PSD	140908	R1_Split 2	CY8CTMA443-48LQIES2	150	5.5	48	48	451	0
PSD	140908	R1_Split 3	CY8CTMA443-48LQIES2	150	5.5	48	48	451	0
PSD	140908	R1_Split 4	CY8CTMA443-48LQIES2	150	5.5	48	48	451	0



PSD	140908	R1_Split 5	CY8CTMA443-48LQIES2	150	5.5	48	48	450	0
PSD	140908	R1_Split 6	CY8CTMA443-48LQIES2	150	5.5	48	48	450	0
PSD	140908	R1_Split 7	CY8CTMA443-48LQIES2	150	5.5	48	48	308	0
PSD	140908	R2_Split 1	CYTMA545-48LQI36ZZA	150	2.07	48	48	1315	0
PSD	140908	R2_Split 2	CYTMA545-48LQI36ZZA	150	2.07	48	48	1120	0
PSD	140908	R2_Split 3	CYTMA545-48LQI36ZZA	150	2.07	48	48	570	0
PSD	141901	R1	CY8C4247LQI-BL483ES	125	2.07	96	96	45	0
PSD	141901	R1_Split 2	CY8C4247LQI-BL483ES	125	2.07	96	96	20	0
PSD	141901	R3_Split 1	CYBL10563-56LQXIES	125	2.07	96	96	336	0
PSD	141901	R3_Split 2	CYBL10563-56LQXIES	125	2.07	96	96	163	0
PSD	141901	R4_Split 1	CY8C4247LQI-BL483ES	125	2.07	96	96	165	0
PSD	141901	R4_Split 2	CY8C4247LQI-BL483ES	125	2.07	96	96	331	0
PSD	141901	R5	CY8C4247LQI-BL483ES	125	2.07	96	96	100	0
PSD	141906	R1_Split 1	CYTMA445-48LQI36ZZAES	150	2.07	48	48	1002	0
PSD	141906	R1_Split 2	CYTMA445-48LQI36ZZAES	150	2.07	48	48	547	0
PSD	141906	R2_Split 1	CYTMA445-48LQI36ZZAES	150	2.07	48	48	950	0
PSD	141906	R2_Split 2	CYTMA445-48LQI36ZZAES	150	2.07	48	48	601	0
PSD	142201	R1_Split 1	CY8CMBR31085-LQXIKG	150	2.07	72	72	592	0
PSD	142201	R1_Split 2	CY8CMBR31085-LQXIKG	150	2.07	48	48	590	0
PSD	142201	R1_Split 3	CY8CMBR31085-LQXIKG	150	2.07	48	48	592	0



PSD	142201	R1_Split 4	CY8CMBR31085-LQXIKG	150	2.07	48	48	241	0
PSD	142201	R2_Split 1	CY8CMBR31085-LQXIKG	150	2.07	48	48	351	0
PSD	142201	R2_Split 2	CY8CMBR31085-LQXIKG	150	2.07	48	48	592	0
PSD	142201	R2_Split 3	CY8CMBR31085-LQXIKG	150	2.07	48	48	592	0
PSD	142201	R2_Split 4	CY8CMBR31085-LQXIKG	150	2.07	72	72	481	0
PSD	142201	R3_Split 1	CY8CMBR31085-LQXIKG	150	2.07	48	48	499	0
PSD	142201	R3_Split 2	CY8CMBR31085-LQXIKG	150	2.07	48	48	499	0
PSD	142201	R3_Split 3	CY8CMBR31085-LQXIKG	150	2.07	48	48	499	0
PSD	142201	R3_Split 4	CY8CMBR31085-LQXIKG	150	2.07	48	48	444	0
PSD	142201	R3_Split 5	CY8CMBR31085-LQXIKG	150	2.07	48	48	74	0
PSD	142307	R2A_Split 1	CYTMA568-100AS54AI	150	2.07	48	48	818	0
PSD	142307	R2A_Split N	CYTMA568-100AS54AI	150	2.07	48	48	837	0
PSD	142307	R2A_Split N1	CYTMA568-100AS54AI	150	2.07	48	48	820	0
PSD	142307	R2A_Split N2	CYTMA568-100AS54AI	150	2.07	48	48	796	0
PSD	142307	R2A_Split N3	CYTMA568-100AS54AI	150	2.07	48	48	783	0
PSD	142307	R2A_Split N4	CYTMA568-100AS54AI	150	2.07	48	48	832	0
PSD	142307	R3A_Split 1	CYTMA568-100AS54BB	150	2.07	48	48	477	0
PSD	142307	R3A_Split N	CYTMA568-100AS54BB	150	2.07	48	48	834	0
PSD	142307	R3A_Split N1	CYTMA568-100AS54BB	150	2.07	48	48	709	0
PSD	143003	R1_Split 1	CY8C4014SXS-421	150	2.07	48	48	1584	0



PSD	143003	R1_Split 2	CY8C4014SXS-421	150	2.07	48	48	1001	0
PSD	143003	R1A	CY8C4014SXS-421ES	150	2.07	60	60	977	0
PSD	143003	R2_Split 1	CY8C4014SXS-421	150	2.07	48	48	1584	0
PSD	143003	R2_Split 2	CY8C4014SXS-421	150	2.07	48	48	676	0
PSD	143003	R2A	CY8C4014SXS-421ES	150	2.07	48	48	1308	0
PSD	143003	R3	CY8C4014SXS-421	150	2.07	60	60	480	0
PSD	143003	R3A_Split 1	CY8C4014SXS-421ES	150	2.07	48	48	1584	0
PSD	143003	R3A_Split 2	CY8C4014SXS-421ES	150	2.07	48	48	1533	0
PSD	143205	R3	CY8C4014LQI-422	150	2.07	48	48	800	0
PSD	143205	R4	CY8C4014LQS-422	150	2.07	48	48	800	0
PSD	143205	R5	CY8C4014LQS-422	150	2.07	48	48	828	0
DCD	143702	R1	CY8C20546A-24PVXIKJ	150	2.1	72	72	1500	0
DCD	143702	R1	CY8C20546A-24PVXIKJ	150	2.1	48	48	1	0
PSD	143803	R1_Split 1	CYTMA445A5-48LQI36ZZ	150	5	48	48	755	0
PSD	143803	R1_Split 2	CYTMA445A5-48LQI36ZZ	150	5	48	48	751	0

Summary for Technology: S8

99

records

Sum

64,782

0



R9

MPD	141002	R2B	CY7C1361C-100BZXE	150	2.25	48	48	1783	0
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Summary for Technology: R9

1 records

Sum								1,783	0
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R95

MPD	141303	R2	CY62146ESL-45ZSIKJ	150	3.6	48	48	1500	0
MPD	141303	R3	CY62147EV30LL-45ZSIKJ	150	1.85	48	48	1495	0
MPD	143703	R1	CY62128EV30LL-45ZSIKJ	150	1.85	72	72	1499	0
MPD	143703	R3	CY62148ELL-55ZSIKJ	150	1.85	72	72	1500	0

Summary for Technology: R95

4 records

Sum								5,994	0
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130nm TI F-RAM

MPD	133705	R3_Split 3	FM25V20A-GES	125	3.6	96	96	188	0
MPD	133705	R3_Split 3	FM25V20A-GES	125	3.6	96	96	296	0
MPD	141603	R1	FM25V02A-GES	125	3.6	96	96	1599	0
MPD	141703	R1	FM24CL64B-GA	125	3.6	96	96	800	0
MPD	141703	R2	FM24CL64B-GA	125	3.6	96	96	800	0
MPD	141703	R3	FM25V01-G	125	3.6	96	96	798	0
MPD	142501	R1	FM22L16-55-TG	125	3.6	96	96	1498	0
MPD	143801	R1_Split 1	CY15B102Q-SXE	125	3.6	96	96	500	0



MPD	143801	R1_Split 2	CY15B102Q-SXE	125	3.6	96	96	1200	0
MPD	143801	R1_Split 3	CY15B102Q-SXE	125	3.6	96	96	1800	0
MPD	143801	R1_Split 4	CY15B102Q-SXE	125	3.6	96	96	100	0

Summary for Technology: 130nm TI F-RAM

11 records

Sum

9,579 0



Summary Detail -- LFR Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
LL65												
	MPD	124902	R4	CY7C1061G30-10BVXIES	125	1.44	1000	1000	175	0		
	MPD	MR133064	R1	CY7C1412KV18-250BZC	150	1.95	500	500	298	0		
	MPD	MR134024	R1	CY7C1312KV18-250BZI	150	1.95	500	500	300	0		
	MPD	MR141049	R1	CY7C1513KV18-300BZXC	150	1.95	500	500	77	0		
	MPD	MR142050	R1	CY7C1513KV18-250BZXC	150	1.95	500	500	77	0		
Summary for Technology: LL65			5	records								
	Sum										927	0
C9												
	MPD	141303	R1	CY7C1049DV33-10ZSXIKJ	150	1.85	500	500	120	0		
	MPD	143704	R2	CY7C1021DV33-10VXIKJ	150	3.77	500	500	124	0		
	PSD	MR131070	R1	CY7C1021DV33-10ZSXAT	150	3.77	408	408	299	0		
	MPD	MR133062	R1	CY7C1041DV33-10ZSXIT	150	3.77	500	500	299	0		
	MPD	MR134028	R1	CY7C1041DV33-10ZSXIT	150	3.77	500	500	300	0		
	PSD	MR134034	R1	CY7C1021DV33-10ZSXAT	150	3.77	408	408	320	0		
	MPD	MR141083	R1	CY7C1041DV33-10ZSXI	150	3.77	500	500	77	0		



MPD	MR142033	R1	CY7C1041DV33-10ZSXIT	150	3.77	500	500	77	0
MPD	MR143010	R1	CY7C1041DV33-10ZSXII	150	3.77	500	500	77	0
MPD	MR144015	R1	CY7C1041DV33-10ZSXII	150	3.77	500	500	77	0
MPD	MR144061	R1	CY7C1041DV33-10ZSXII	150	3.77	500	500	77	0

Summary for Technology: C9 **11** **records**

Sum								0	1,847
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R7

PSD	MR141080	R1	CY7C1041CV33-20ZSXET	150	2.3	408	408	77	0
PSD	MR143033	R1	CY7C1041CV33-12ZSXET	150	2.3	408	408	76	0

Summary for Technology: R7 **2** **records**

Sum								0	153
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R8

PSD	MR132066	R1	CY62167DV30LL-70BVIT	150	2.4	500	500	77	0
MPD	MR134058	R1	CY62167DV30LL-55BVXI	150	2.4	500	500	77	0
MPD	MR141050	R1	CY62167DV30LL-55BVXI	150	2.4	500	500	77	0
MPD	MR142032	R1	CY62167DV30LL-55BVXI	150	2.4	500	500	77	0

Summary for Technology: R8 **4** **records**

Sum								0	308
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S8

MPD	114501	R4C	CY14E116S-BZ45XI	125	5.5	1000	1000	120	0
MPD	114501	R4D	CY14B116S-BZ45XI	125	3.3	1000	1000	120	0
MPD	114501	R6	CY14B116N-Z45XI	125	3.3	160	160	120	0
MPD	114501	R6A	CY14E116S-BZ45XI	125	5.5	1000	1000	119	0
MPD	114501	R6A	CY14E116S-BZ45XI	125	5.5	1024	1024	1	0
MPD	114501	R6B	CY14E116S-BZ45XI	125	3.3	1000	1000	113	0
MPD	114501	R6C	CY14E116N-Z45XI	125	5.5	160	160	120	0
PSD	134903	R1	CY8C4245AXI4-483	150	2.07	500	500	120	0
PSD	134904	R1	CY8C4245AXI8-483	150	2.07	500	500	116	0
PSD	140404	R1	CY8CMBR31085CP-LQX1KA	150	2.07	80	80	118	0
PSD	140504	R2	CYTMA445A-48TCES	150	2.07	500	500	87	0
PSD	141001	R1	CYONSFN3050A-100AZA	150	2.07	408	408	82	0
PSD	141001	R2	CYONSFN3050A-100AZA	150	2.07	408	408	82	0
PSD	141001	R3	CYONSFN3050A-100AZA	150	2.07	408	408	82	0
PSD	141901	R1	CY8C4247LQI-BL483ES	125	2.07	1000	1000	193	0
PSD	141906	R1	CYTMA445-48LQI36ZZAES	150	2.07	500	500	120	0
PSD	142306	R1	CY8C4014SXS-421	150	2.07	408	408	80	0
PSD	142306	R3	CY8C4014SXS-421	150	2.07	408	408	80	0
PSD	142306	R1A	CY8C4014SXS-421ES	150	2.07	408	408	80	0



PSD	143205	R3	CY8C4014LQI-422	150	2.07	408	408	80	0
PSD	143205	R5	CY8C4014LQS-422	150	2.07	408	408	80	0
PSD	143205	R4	CY8C4014LQS-422	150	2.07	408	408	80	0
DCD	143702	R1	CY8C20546A-24PVXIKJ	150	2.1	500	500	120	0
PSD	MR133030	R1	CY8CTMA461-48LQI	150	5.75	500	500	297	0
PSD	MR141058	R1	CY8CTMA461-48LQIT	150	2.08	500	500	77	0
PSD	MR143021	R1	CY8CTMA400-48LQI	150	2.08	500	500	77	0
PSD	MR142023	R1	CY8CMBR3145-LQXIT	150	2.07	500	500	72	0

Summary for Technology: S8 **27** **records**

Sum							2,836	0
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S4

PSD	MR141066	R1	CY8CTMA120-56LFXAT	150	5.5	408	408	77	0
PSD	MR142017	R1	CY8CTMA120-56LFXAT	150	5.5	408	408	77	0
PSD	MR143008	R1	CY8CTMA120-56LFXAT	150	5.5	408	408	76	0

Summary for Technology: S4 **3** **records**

Sum							230	0
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R9

PSD	141002	R1	CY7C1361C-100BZXE	150	2.25	408	408	80	0
PSD	141002	R2	CY7C1361C-100BZXE	150	2.25	408	408	80	0
PSD	141002	R3	CY7C13451G-100BZXE	150	2.25	408	408	80	0



CYPRESS
EMBEDDED IN TOMORROW™

MPD	141302	R1	CY7C1370D-167AXCKJ	150	2.25	620	620	120	0
MPD	141302	R2	7C1490XC	150	2.25	620	620	120	0
MPD	MR134036	R1	CY7C1380D-167AXCKA	150	2.25	500	500	300	0
MPD	MR141075	R1	CY7C1380D-167AXI	150	2.25	500	500	77	0
MPD	MR142037	R1	CY7C1381D-133AXI	150	2.25	500	500	77	0
MPD	MR143006	R1	CY7C1370D-167AXC	150	2.25	500	500	77	0

Summary for Technology: R9 9 records

Sum 1,011 0

R95

MPD	141303	R2	CY62146ESL-45ZSXIKJ	150	1.85	500	500	120	0
MPD	141303	R3	CY62147EV30LL-45ZSIKJ	150	1.85	500	500	120	0
MPD	143703	R1	CY62128EV30LL-45SXIKJ	150	1.85	80	80	126	0
MPD	143703	R3	CY62148ELL-55SXIKJ	150	1.85	80	80	126	0
MPD	143703	R3	CY62148ELL-55SXIKJ	150	1.85	500	500	116	0
MPD	MR131072	R1	CY62167EV30LL-45BVXIT	150	1.85	500	500	300	0
MPD	MR134051	R1	CY62146EV30LL-45ZSXIT	150	1.85	500	500	239	0
PSD	MR141064	R1	CY62128EV30LL-45ZAXAT	150	1.85	408	408	77	0
MPD	MR142014	R1	CY62128ELL-55ZAXE	150	1.85	408	408	77	0
PSD	MR142016	R1	CY62147EV30LL-45ZSXAT	150	1.85	408	408	77	0
PSD	MR143007	R1	CY62128ELL-55ZAXET	150	1.85	408	408	77	0



PSD	MR143013	R1	CY62157EV30LL-45ZSXAT	150	1.85	408	408	77	0
PSD	MR143016	R1	CY62146EV30LL-45ZSXA	150	1.85	408	408	77	0
PSD	MR144030	R1	CY62157EV30LL-45ZSXAT	150	1.85	408	408	77	0
PSD	MR144032	R1	CY62148EV30LL-45ZSXAT	150	1.85	408	408	77	0

Summary for Technology: R95 **15** **record**

Sum **1,763** **0**

R42

MPD	MR134038	R1	CY62256NLL-55SNXIT	150	5	500	500	299	0
MPD	MR141051	R1	CY62256NLL-70SNXCT	150	5.75	500	500	77	0

Summary for Technology: R42 **2** **records**

Sum **376** **0**

CM018G

CMO18G	DCD	134704	R1	CYRF9935-24LQXCES	150	3.78	524	524	116	0
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Summary for Technology:CM018G **1** **record**

Sum **116** **0**

130nm TI F-RAM

MPD	133705	R4	FM25V20-G	125	3.6	1000	1000	77	0
MPD	133705	R5	FM25V20-G	125	3.6	1000	1000	77	0
MPD	133705	R6	FM25V20-G	125	3.6	1000	1000	77	0



MPD	140501	R7	FM25V20A-G	125	3.6	1000	1000	116	0
MPD	140502	R1	FM25V20A-GES	125	0	1000	1000	116	0
MPD	140503	R1	FM25V20A-DGES	150	3.6	832	832	114	0
MPD	141003	R1	FM28V202A-TG	150	3.6	1000	1000	104	0
MPD	141603	R1	FM25V02A-GES	125	3.6	1000	1000	188	0
MPD	141703	R1	FM24CL64B-GA	125	3.6	1000	1000	78	0
MPD	141703	R2	FM24CL64B-GA	125	3.6	1000	1000	78	0
MPD	141703	R3	FM25V01-G	125	3.6	1000	1000	78	0
MPD	142502	R1	FM25V02-G	125	3.6	1000	1000	77	0

Summary for Technology: 130nm TI F-RAM **16** **records**

Sum **1,180** **0**



Summary Detail -- DRET Performance Over Time

TECHNOLOGY	DIVISION	EVALNUM	TV	DEVICE	TEMP	VOLT	READOUT	DURATION	SS	REJECT	FA	COMMENTS
S4												
	PSD	MR134057	R1	CY8C24533-24PVI	150	0	1000	1000	80	0		
Summary for Technology: S4			1	record								
	Sum										80	0
S8												
	PSD	134904	R1_Split 1	CY8C4245AXI8-483	150	0	1000	1000	76	0		
	PSD	134904	R1_Split 2	CY8C4245AXI8-483	150	0	1000	1000	4	0		
	PSD	140404	R1	CY8CMR31085CP-LQXIKA	150	0	500	500	80	0		
	PSD	140506	R1	CY8CTMA400-48LQIES2	150	0	500	500	80	0		
	PSD	141901	R1	CY8C4247LQI-BL483ES	150	0	1500	1500	80	0		
	PSD	141906	R1	CYTMA445-48LQI36ZZAES	150	0	1000	1000	80	0		
	PSD	142201	R1	CY8CMR31085-LQXIKG	175	0	288	288	80	0		
	PSD	MR144042	R1	CY8C20446A-24LQXI	150	0	500	500	160	0		
	PSD	MR144043	R1	CY8C20436A-24LQXIT	150	0	500	500	160	0		
Summary for Technology: S8			9	records								
	Sum										800	0



MPD	141603	R1	FM25V02A-GES	125	0	1000	1000	80	0
MPD	142501	R1	FM22L16-55-TG	125	0	1000	1000	80	0
MPD	143801	R1	CY15B102Q-SXE	150	0	1000	1000	77	0

Summary for Technology: 130nm TI F-RAM

Sum **3** **records** **237** **0**



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)											
BK48DJALL	G	135002	R5	CY62177DV30LL-55BAXI	130	3.1	96	30	0		
BK48DJALL	G	135002	R6	CY62177DV30LL-55BAXI	130	3.1	96	29	0		
BK48DJALL	G	135002	R7	CY62177DV30LL-55BAXI	130	3.1	96	30	0		
BK48DJALL	G	135002	R8	CY62177DV30LL-55BAXI	130	3.1	96	30	0		
BK48PAALL	RA	143807	R1	CY14B104NA-BA45XI	130	3.3	96	25	0		
BK48PAALL	RA	143807	R2	CY14B104NA-BA45XI	130	3	96	25	0		
BK121BGAGL	RA	MR124053	R1	CG7648AM	130	3.63	128	30	0		
BK48DJALL	G	MR132047	R1	CY62177DV30LL-55BAXIT	130	3.6	128	30	0		
BK121DAGLC	G	MR133038	R3	CG7648AM	130	3.63	128	45	0		
BK121BGAGL	RA	MR134011	R1	CYUSB3011-BZXC	130	5.5	96	30	0		
BK48DJALL	G	MR134047	R1	CY62177DV30LL-55BAXIT	130	3.6	128	30	0		
BK121DGAGL	G	MR141004	R3	CYUSB3014-BZXI	130	5.5	128	30	0		
BK121DAGLC	G	MR141004	R4	CYUSB3014-BZXC	130	5.5	128	30	0		
BK48MACALL	G	MR141047	R1	CY7C1041CV33-10BAJXET	130	3.65	128	30	0		
BK48DLALL	G	MR141078	R1	CY62177EV30LL-55BAXI	130	3.6	128	30	0		
BK48DLALL	G	MR142012	R1	CY62177EV30LL-55BAXI	130	3.6	96	30	0		
BK121BGAGL	RA	MR142028	R1	CYUSB3014-BZXC	130	5.5	96	30	0		



BK121DGAGL	G	MR142060	R1	CG7648AMT	130	5.5	128	30	0				
BK121BGAGL	RA	MR144006	R1	CG7983AMT	130	3.63/5.5/1.32	96	26	0				
BK121DGAGL	G	MR144022	R1	CYUSB3035-BZXI	130	3.63/5.5/1.32	96	30	0				
Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)				20	records								
Sum								600	0				

FBGA (1.0-1.27)

BB165AVLE	RA	MR132003	R1	CY7C1305TV25-167BZC	130	1.98	128	28	0
BB165BCLLE	G	MR134054	R1	CY7C1354D-200BZC	130	3.6	128	30	0
BB165RJLEC	RA	MR134068	R3	CY7C1414KV18-300BZCKA	130	1.95	128	28	0
BB165XALEC	G	MR142048	R2	CY7C1315KV18-250BZC	130	1.95	128	30	0
BB165AVLE	RA	MR144019	R1	CY7C1305TV25-167BZC	130	1.98	96	30	0

Summary for Package Family: FBGA (1.0-1.27)

5 records

Sum **146** **0**

FBGA (1.0-1.27, Pb-free)

BW165BCALL	G	141002	R1	CY7C1361C-100BZXE	130	3.6	96	80	0
BW165BCALL	G	141002	R1	CY7C1361C-100BZXE	130	3.6	168	80	0
BW165BCALL	G	141002	R2	CY7C1361C-100BZXE	130	3.6	96	80	0
BW165BCALL	G	141002	R2	CY7C1361C-100BZXE	130	3.6	168	80	0
BW165BCALL	G	141002	R3	CY7C13451G-100BZXE	130	3.6	96	80	0
BW165BCALL	G	141002	R3	CY7C13451G-100BZXE	130	3.6	168	80	0
BW165BCALL	G	141204	R1	CY7C1361C-100BZXE	130	3.6	96	80	0
BW165BCALL	G	141204	R1	CY7C1361C-100BZXE	130	3.6	168	80	0
BW165BCALL	G	141204	R2	CY7C1361C-100BZXE	130	3.6	96	80	0
BW165BCALL	G	141204	R2	CY7C1361C-100BZXE	130	3.6	168	80	0
BW165BCALL	G	141204	R3	CY7C13451G-100BZXE	130	3.6	96	80	0



BW165BCALL	G	141204	R3	CY7C13451G-100BZXE	130	3.6	168	80	0
BW165CELLC	G	MR151012	R1	CY7C1414LV18-250BZXC	130	1.95	96	30	0

Summary for Package Family: FBGA (1.0-1.27, Pb-free) **30 records**

Sum	990	0
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FCBGA

FR361BALL	G	140604	R1	CY7C4121KV13-600FCXC	130	3.6	128	25	0
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Summary for Package Family: FCBGA **5 records**

Sum	25	0
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VFBGA (0.75-0.8, 0.3mm)

BV48CFAALE	G	MR131018	R1	CY62157EV30LL-45BVIT	130	5.5	96	30	0
BV48CLALE	G	MR124055	R1	CY7C1041DV33-10BVIT	130	3.65	96	30	0

Summary for Package Family: VFBGA (0.75-0.8, 0.3mm) **2 records**

Sum	60	0
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VFBGA (0.75-0.8, 0.3mm, Pb-Free)

BZ48ARDLLC	RA	124902	R5B	CY7C1061G30-10BVXIES	130	3.65	128	79	0
BZ48CEAALL	G	MR123034	R1	CY62147EV30LL-45BVXA	130	3.6	96	30	0
BZ48CEAALL	G	MR124028	R1	CY62147EV30LL-45BVXA	130	3.6	96	30	0
BZ48CWALL	G	MR124045	R1	CY7C1061DV33-10BVXIT	130	3.65	96	30	0
BZ48CKAALL	RA	MR131028	R1	CY7C1041DV33-10BVXIT	130	3.65	128	30	0
BZ48CEAALL	G	MR131035	R1	CY62147EV30LL-45BVXA	130	3.6	96	30	0
BZ48CLAALL	G	MR132011	R1	CY7C1041DV33-10BVXI	130	3.65	128	30	0
BZ48CRALLC	G	MR134003	R1	CY62167EV30LL-45BVXI	130	3.6	96	29	0
BZ48ZEALEC	RA	MR141033	R1	CY62157EV18LL-55BVXIT	130	5.5	96	29	0
BZ48CEAALL	G	MR142021	R1	CY62147EV30LL-45BVXA	130	3.6	96	29	0
BZ48ZEALEC	RA	MR142044	R1	CY62157EV30LL-45BVXIT	130	3.3	96	29	0



BZ48ZEALEC	RA	MR144060	R1	CY62157EV18LL-55BVXIT	130	5.5	96	30	0
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**Summary for Package Family: VFBGA
(0.75-0.8, 0.3mm, Pb-Free)**

Sum							405	0
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UFBGA (Pb-free)

BU48AAAALC	G	142004	R1	CYTMA525	130	5.5	128	80	0
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Summary for Package Family: UFBGA (Pb-free)

Sum							80	0
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PDIP (Pb-Free)

PZ183DPBGN	RA	MR132046	R1	CY7C63813-PXC	130	5.5	96	30	0
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PZ183DPGNC	RA	MR141026	R1	CY7C63813-PXC	130	5.5	128	30	0
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PZ286VFARC	M	MR142030	R1	CY62256NLL-70PXC	130	5.5	96	30	0
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PZ183DPGNC	RA	MR143032	R1	CS6632AF	130	5.5	96	29	0
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Summary for Package Family: PDIP (Pb-Free)

Sum							119	0
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QFN (COL, 0.6mm, Saw Type, Pb-free)

LG16AEAAAL	MB	MR124033	R1	CY8C20234-12LKXAT	130	5.25	96	30	0
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LG16ARAARC	G	MR134019	R1	CY8C200654-24LKXIKG	130	5.25	128	28	0
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LG16ARAARC	G	MR141034	R10	CY8C20075-24LKXIT	130	5.25	128	25	0
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LG16ARAARC	G	MR141034	R6	CY8C20075-24LKXIT	130	5.25	128	25	0
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LG16ARAARC	G	MR141034	R7	CY8C20075-24LKXIT	130	5.25	128	24	0
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LG16ARAARC	G	MR141034	R9	CY8C20075-24LKXIT	130	5.25	128	25	0
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LG16AEPALC	RA	MR141042	R1	CY8C20075-24LKXIT	130	5.25	128	40	0
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LG16AEPALC	RA	MR141042	R2	CY8C20075-24LKXIT	130	5.25	128	40	0
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LG16AEPALC	RA	MR141045	R1	CY8C20075-24LKXIT	130	5.25	128	30	0
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LG16AEAAAL	MB	MR141059	R1	CY8C20236A-24LKXI	130	5.25	128	30	0
LG16AQAAAL	G	MR143011	R1	CY8C20247-24LKXI	130	5.25	128	30	0
LG16ARAARC	G	MR143047	R1	CY8C20075-24LKXIT	130	5.25	96	30	0
LG16AQAAAL	G	MR144009	R1	CG7745AAT	130	5.25	96	29	0
LG16AQAAAL	G	MR151018	R1	CG7602AAT	130	5.25	96	29	0
Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)				14	records				
Sum								415	0

QFN (Saw Type, Pb-Free)

LQ48AEAAAL	RA	132504	R1	CY8CTMA443-48LQIES4	130	5.5	128	80	0
LQ24AQBARC	G	134802	R1	CYRF9935-24LQXCES	130	3.6	256	80	0
LQ24AQBARC	G	134802	R2	CYRF9935-24LQXC	130	3.6	256	79	0
LQ24AQBARC	G	134802	R3	CYRF9935-24LQXC	130	3.6	128	80	0
LQ24AQBARC	G	134802	R3	CYRF9935-24LQXC	130	3.6	256	80	0
LQ48AGAACLC	RA	140902	R2	CYTMA445A-48TCES	130	2.07	96	30	0
LQ48AGAACLC	RA	140902	R3	CYTMA445A-48TCES	130	2.07	96	30	0
LQ48AGAACLC	RA	140902	R4	CYTMA445A-48TCES	130	2.07	96	29	0
LQ48AGAACLC	RA	140903	R4	CYTMA445A-48TCES	130	2.07	96	30	0
LQ48AGAACLC	RA	140903	R5	CYTMA445A-48TCES	130	2.07	96	30	0
LQ48AGAACLC	RA	140903	R6	CYTMA445A-48TCES	130	2.07	96	29	0
LQ48AHAARC	G	140904	R1	CYTMA445A-48TCES	130	5.5	96	26	0
LQ48AHAARC	G	140904	R2	CYTMA445A-48TCES	130	5.5	96	30	0
LQ48AHAARC	G	140904	R3	CYTMA445A-48TCES	130	5.5	96	27	0
LT88BBARC	UT	141304	R1	CYUSB3326-88LTXC	130	1.32/3.63	128	80	0
LQ16AAAALC	RA	141604	R1	CY8CMBR3145-LQXI	130	5.5	96	25	0
LT68ADAAGL	RA	141604	R3	CY8C3866LTI-209	130	5.5	96	25	0



LQ48AEAALC	RA	141702	R7	CY8CTMA4634-48LQIKA	130	5.5	128	80	0
LQ48AEAALC	RA	141702	R8	CY8CTMA4634-48LQIKA	130	5.5	128	80	0
LQ48AEAALC	RA	141702	R9	CY8CTMA4634-48LQIKA	130	5.5	128	80	0
LQ16ABBALC	UT	141704	R4	CY8CMBR3145-LQXIES	130	5.5	96	29	0
LQ24ABBALC	UT	141704	R5	CY8CMBR3116-LQXIES	130	5.5	96	25	0
LQ56AAAALC	RA	141901	R2	CY8C4247LQI-BL483ES	130	5.5	96	28	0
LQ56AAAALC	RA	141901	R2	CY8C4247LQI-BL483ES	130	5.5	128	28	0
LQ48ABAALC	RA	141906	R1	CYTMA445-48LQI36ZZAES	130	5.5	96	30	0
LQ48ABAALC	RA	141906	R2	CYTMA445-48LQI36ZZAES	130	5.5	96	30	0
LQ16ABARC	G	142201	R1	CY8CMBR31085-LQXIKG	130	5.5	96	29	0
LQ16ABARC	G	142201	R2	CY8CMBR31085-LQXIKG	130	5.5	96	80	0
LQ16ABARC	G	142201	R3	CY8CMBR31085-LQXIKG	130	5.5	96	30	0
LQ56AAAALC	RA	143004	R1	CY8C4247LQI-BL483ES	130	5.5	96	28	0
LQ56AAAALC	RA	143004	R1	CY8C4247LQI-BL483ES	130	5.5	128	27	0
LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	130	3.65	96	30	0
LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	130	3.65	128	30	0
LQ24AABALC	RA	143205	R1	CY8C4014LQI-422	130	5.5	96	80	0
LQ24AABALC	RA	143205	R2	CY8C4014LQI-422	130	5.5	96	80	0
LQ24AABALC	RA	143205	R3	CY8C4014LQI-422	130	5.5	96	80	0
LQ48AHAARC	G	145004	R3	CYTMA445A-48TCES	130	5.5	96	26	0
LQ48AHAARC	G	145004	R4	CYTMA445A-48TCES	130	5.5	96	30	0
LQ48AHAARC	G	145004	R5	CYTMA445A-48TCES	130	5.5	96	27	0
LQ48AGAACLC	RA	145007	R3	CYTMA445A-48TCES	130	2.07	96	30	0
LQ48AGAACLC	RA	145007	R4	CYTMA445A-48TCES	130	2.07	96	30	0
LQ48AGAACLC	RA	145007	R5	CYTMA445A-48TCES	130	2.07	96	29	0
LT68BAAALC	RA	150404	R1	CYUSB3304-68LTXC	130	3.63	96	25	0



LT68BAAALC	RA	150404	R2_Split 1	CYUSB3304-68LTXC	130	3.63	96	15	0
LT68BAAALC	RA	150404	R2_Split 2	CYUSB3304-68LTXC	130	3.63	96	10	0
LT68BAAALC	RA	150404	R3	CYUSB3304-68LTXC	130	3.63	96	25	0
LT56BCAAGL	AE	MR122026	R1	CY7C65631-56LTXCT	130	3.8	96	28	0
LQ32QAAAAL	G	MR123042	R1	CY24292LFXCT	130	3.63	96	29	0
LQ48AQAAALC	G	MR132020	R1	CG7479AM	130	5.5	128	27	0
LT56BPAAGL	RA	MR133042	R1	CS7275AAT	130	3.63	128	30	0
LQ48ABAALC	RA	MR134013	R1	CYTMA545-48LQI36ZZ	130	5.5	96	30	0
LQ48ABAALC	RA	MR141024	R1	CY8CTMA445-48LQIT	130	5.5	128	30	0
LQ48ABAALC	RA	MR142003	R1	CYTMA545-48LQI36AB	130	5.5	128	30	0
LT56BEAGLC	RA	MR142049	R1	CS6651JAT	130	5.25	96	30	0
LQ48ARAALC	G	MR143046	R1	CYTMA545-48LQI36ZZ	130	5.5	128	30	0
LQ48ABAALC	RA	MR143050	R1	CP8109ATT	130	5.5	96	30	0
LT56BPAAGL	RA	MR143056	R1	CS7275AAT	130	3.67	96	30	0
LQ48ABAALC	RA	MR144003	R1	CY8CTMA445-48LQIT	130	5.5	96	30	0
LT56BEAGLC	RA	MR144035	R1	CY7C64215-56LTXCT	130	5.25	96	30	0
LT32BAABGL	RA	MR151009	R1	CG7558AAT	130	5.25	96	30	0
LQ16ABBALC	UT	MR151013	R1	CG8356AAT	130	5.5	96	30	0
LQ16ABARC	G	MR151019	R1	CG8164AAT	130	5.5	96	30	0

Summary for Package Family:QFN (Saw Type, Pb-Free) **62** **records**

Sum **2415** **0**

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

LW56DGAZGL	L	MR142009	R1	CP7598AT	130	5.25	128	30	0
LW56DGAZGL	L	MR143035	R1	CP7598ATT	130	5.25	96	30	0
LW56DGAZGL	L	MR144008	R1	CP7598ATT	130	5.25	96	30	0

Summary for Package Family: QFN (Punch Type, Wettable Flank, Pb-Free)**3 records****Sum** **90 0****QFN (Punch Type, Pb-Free)**

LY48EGAGL	L	MR134041	R1	CYWUSB6953-48LFXC	130	3.63	96	25	0
Summary for Package Family: QFN (Punch Type, Pb-Free)			1 record						

Sum**25 0****DFN (0.8mm Thickness, Saw Type)**

LH08DBAALL	UT	140503	R2	FM25V20A-DGES	130	3.6	128	68	0
LH08AFAALL	UT	142503	R1	FM25V02-DG	130	3.6	96	25	0

Summary for Package Family: DFN, 0.8mm Thickness (Saw Type)**2 records****93 0****QSOP (Pb-Free)**

SQ2414ACGN	JT	MR131044	R1	CY7C63823-QXC	130	5.5	96	30	0
SQ2414ACGN	JT	MR134055	R1	CY7C63743C-QXC	130	5.5	128	30	0
SQ2414ACGN	JT	MR141044	R1	CY7C63823-QXC	130	5.5	96	30	0

Summary for Package Family: QSOP (Pb-Free)**3 records****Sum****90 0**



SNC (Pb-Free)

SY2831AIHN	JT	MR143002	R1	CG7427AA	130	5.5	96	30	0
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Summary for Package Family: SNC (Pb-Free)

1 record

Sum

30 0

SOIC (Pb Free)

SZ820AAAGL	UT	140501	R4	FM25V20A-G	130	3.6	96	25	0
SZ820AAAGL	UT	140501	R4	FM25V20A-G	130	3.6	128	25	0
SZ820AAAGL	UT	140501	R5	FM25V20A-G	130	3.6	96	24	0
SZ820AAAGL	UT	140501	R5	FM25V20A-G	130	3.6	128	24	0
SZ820AAAGL	UT	140501	R6	FM25V20A-G	130	3.6	96	25	0
SZ820AAAGL	UT	140501	R6	FM25V20A-G	130	3.6	128	25	0
SW815JRALL	UT	142502	R1	FM25V02-G	130	3.6	96	25	0
SW815JRALL	UT	142502	R2	FM25V02-G	130	3.6	96	25	0
SW815JRALL	UT	142502	R3	FM25V02-G	130	3.6	96	25	0
SZ1615FAL	T	144904	R4	CY8C20160-SX2I	130	5.25	96	50	0
SW815JRALL	UT	141703	R2	FM24CL64B-GA	130	3.6	96	80	0
SW815JRALL	UT	141703	R1	FM24CL64B-GA	130	3.6	96	80	0
SZ815QRALL	UT	141703	R3	FM25V01-G	130	3.6	96	80	0
SZ1615MAAL	RA	142306	R1	CY8C4014SXS-421	130	5.5	96	78	0
SZ1615MAAL	RA	142306	R2	CY8C4014SXS-421	130	5.5	96	80	0
SZ1615MAAL	RA	142306	R3	CY8C4014SXS-421	130	5.5	96	80	0
SZ815PAAAN	RA	142801	R1	FM24V01-G	130	3.6	128	77	0
SZ815PAAAN	RA	142801	R2	FM24V01-G	130	3.6	128	77	0
SZ1615MAAL	RA	143003	R1	CY8C4014SXS-421	130	5.5	96	78	0
SZ1615MAAL	RA	143003	R2	CY8C4014SXS-421	130	5.5	96	80	0
SZ1615MAAL	RA	143003	R3	CY8C4014SXS-421	130	5.5	96	80	0



SZ32458LNC	JT	143703	R1	CY62128EV30LL-45SXIJK	130	3.6	96	30	0
SZ32458LNC	JT	143703	R2	CY62128EV30LL-45SXIJK	130	3.6	96	30	0
SZ32451LLC	JT	143703	R3	CY62148ELL-55SXIJK	130	3.6	96	30	0
SZ820AAAGL	UT	143801	R1	CY15B102Q-SXE	130	3.6	96	77	0
SZ820AAAGL	UT	143801	R1	CY15B102Q-SXE	130	3.6	128	77	0
SZ1615FAL	T	144904	R4	CY8C20160-SX2I	130	5.25	96	50	0
SZ1615NGNC	RA	150801	R1	CYPD1132-16SXIES	130	5.5	96	24	0
SZ24315DGN	RA	MR121011	R1	CY7C63823-SXC	130	5.5	96	30	0
SZ183CPBAN	RA	MR123024	R1	CY7C63813-SXC	130	5.5	96	30	0
SZ24315DGN	RA	MR124054	R1	CY7C63823-SXC	130	5.5	96	30	0
SZ183CPEAN	RA	MR131031	R1	CY7C63723C-SXC	130	5.5	96	30	0
SZ28327CGL	JT	MR132018	R1	CY8C21345-24SXI	130	5.25	96	30	0
SZ815CGAAS	M	MR133022	R1	CY2305CSXA-1HT	130	3.63	96	30	0
SZ24315EGN	RA	MR133044	R1	CP6604BMT	130	5.5	128	30	0
SZ1615FAL	T	MR134065	R1	CY23EP09SXI-1T	130	3.63	128	30	0
SZ24315GNC	RA	MR141041	R1	CY7C63823-SXCKA	130	5.5	128	45	0
SZ24315GNC	RA	MR141041	R2	CY7C60223-SXCKA	130	5.5	128	45	0
SZ1615FAL	T	MR141068	R1	CY8C20110-SX2I	130	5.25	96	30	0
SZ1615FAL	T	MR143018	R1	CY8C20110-SX2I	130	5.25	96	30	0
SZ24315DGN	RA	MR143051	R1	CY7C63823-SXC	130	5.5	96	30	0
SZ815CGAAS	M	MR143057	R1	CY2305CSXA-1HT	130	3.63	128	30	0
SZ815CGAAS	M	MR144046	R1	CY2305CSXA-1HT	130	3.63	96	30	0
SZ183CPANC	RA	MR151021	R1	CY7C63813-SXC	130	5.5	96	30	0

Summary for Package Family: SOIC (Pb Free)

44 records

Sum

1971 0

**SOJ (Pb-Free)**

VZ444ACLNC	JT	143704	R2	CY7C1021DV33-10VXIKJ	130	3.63	96	30	0
VZ444ACLNC	JT	143704	R3	CY7C1021DV33-10VXIKJ	130	3.63	96	30	0
VZ444ACCLN	JT	MR134033	R1	CY7C1021DV33-10VXI	130	3.65	96	29	0
VZ28313CLN	JT	MR134072	R1	CY7C1399BN-12VXCT	130	3.63	128	30	0
VZ32314CLL	JT	MR141074	R1	CY7C1018DV33-10VXIT	130	3.77	128	30	0
VZ32314CLL	JT	MR142011	R1	CY7C1018DV33-10VXIT	130	3.77	128	30	0
VZ32314CLL	JT	MR143045	R1	CY7C1018DV33-10VXIT	130	3.77	96	30	0

Summary for Package Family: SOJ (Pb-Free)

7 records

209 0**Sum****SSOP (Pb-Free)**

SP483ACANC	JT	143702	R1	CY8C20546A-24PVXIKJ	130	5.5	96	30	0
SP483ACANC	JT	143702	R2	CY8C20546A-24PVXIKJ	130	5.5	96	30	0
SP563DBGNC	JT	143702	R3	CY7C68013A-56PVXCKJ	130	5.5	96	30	0
SP483FBBGN	RA	MR132045	R1	CY7C63413C-PVXC	130	5.5	96	30	0
SP202AABGN	RA	MR134042	R1	CY8C24223A-24PVXIT	130	5.25	128	30	0
SP563DBCGN	JT	MR141063	R1	CY7C68013A-56PVXC	130	3.63	96	30	0
SP2024CAGL	M	MR142020	R1	CY8C21334-24PVXA	130	5.25	96	30	0
SP483MBGNC	RA	MR142052	R1	CY8C29666-24PVXI	130	5.25	128	44	0
SP483MBGNC	RA	MR142052	R2	CY8C29666-24PVXI	130	5.25	128	44	0
SP483MBGNC	RA	MR142052	R3	CY8C29666-24PVXI	130	5.25	128	44	0
SP282ABGNC	RA	MR142061	R1	CY8C24533-24PVXI	130	5.25	96	30	0
SP282BGL	M	MR143003	R1	CY8C21534-12PVXE	130	5.25	96	30	0
SP282ABGNC	RA	MR143015	R1	CY8C24533-24PVXI	130	5.25	96	30	0



SP563DBCGN	JT	MR143055	R1	CG8082AM	130	3.63	96	30	0
SP282ABGNC	RA	MR144002	R1	CY8C24533-24PVXI	130	5.25	96	30	0
SP2024CAGL	M	MR144036	R1	CY8C21334-24PVXAT	130	5.25	96	30	0
Summary for Package Family: SSOP (Pb-Free)				16	records				
Sum							522	0	

TQFP (Pb-Free)

AZ100SJAAL	R	141001	R1_Split 1	CYONSFN3050A-100AZA	130	3.6	96	80	0
AZ100SJAAL	R	141001	R1_Split 2	CYONSFN3050A-100AZA	130	3.6	96	5	0
AZ100SJAAL	R	141001	R2_Split 1	CYONSFN3050A-100AZA	130	3.6	96	80	0
AZ100SJAAL	R	141001	R2_Split 2	CYONSFN3050A-100AZA	130	3.6	96	5	0
AZ100SJAAL	R	141001	R3_Split 1	CYONSFN3050A-100AZA	130	3.6	96	80	0
AZ100SJAAL	R	141001	R3_Split 2	CYONSFN3050A-100AZA	130	3.6	96	5	0
AZ100RRDLL	JT	141302	R2	7C1490XC-**JTAZC	130	3.6	192	73	0
AZ44ABAASC	G	141404	R1	CY8C4245AXI-483	130	5.5	128	80	0
AZ44ABAASC	G	141404	R2	CY8C4245AXI-483	130	5.5	128	80	0
AZ44ABAASC	G	141404	R3	CY8C4245AXI-483	130	5.5	128	80	0
AZ100SJAAL	R	142307	R1	CYTMA568-100AS54ZX	130	5.5	96	80	0
AZ100SJAAL	R	142307	R1	CYTMA568-100AS54ZX	130	5.5	128	80	0
AZ100SJAAL	R	142307	R2	CYTMA568-100AA54AI	130	5.5	96	80	0
AZ100SJAAL	R	142307	R2	CYTMA568-100AA54AI	130	5.5	128	80	0
AZ100SJAAL	R	142307	R3	CYTMA568-100AA54BB	130	0.6/5.5	96	80	0
AZ100SJAAL	R	142307	R3	CYTMA568-100AA54BB	130	0.6/5.5	128	80	0
AZ100SJAAL	R	143210	R1	CYTMA568-100AS54ZX	130	5.5	96	80	0
AZ100SJAAL	R	143210	R2	CYTMA568-100AA54AI	130	5.5	96	80	0
AZ100SJAAL	R	143210	R3	CYTMA568-100AA54BB	130	5.5	96	80	0
AZ48AAAAS	T	144403	R1	CY8C4245AZI-483ES	130	5.5	96	30	0



AZ48BAAAAS	JT	144404	R1	CY8C4245AZI-483ES	130	5.5	96	25	0
AZ100RMLBLN	RA	MR132034	R1	CY7C1370D-167AXC	130	3.6	128	30	0
AZ100RMLNC	R	MR134039	R1	CY7C1370D-167AXIKA	130	3.6	128	30	0
AZ100RVLN	JT	MR134056	R1	CY7C68320C-100AXA	130	3.63	96	30	0
AZ100RUCLN	JT	MR141014	R1	CY7C1350G-200AXC	130	3.63	128	30	0
AZ100RPAGN	R	MR141069	R1	CY7C1354C-166AXC	130	3.6	128	30	0
AZ100RUCLN	JT	MR142019	R2	CY7C1350G-200AXC	130	3.63	128	30	0
AZ100RBCLN	JT	MR143041	R1	CY7C1370D-167AXI	130	3.63	96	30	0
AZ100RUCLN	JT	MR143044	R1	CY7C1350G-200AXC	130	3.63	96	30	0
AZ100RYLNC	JT	MR144014	R1	CY7C1360C-166AXI	130	3.6	96	40	0
AZ100RYLNC	JT	MR144014	R2	CY7C1360C-166AXI	130	3.6	96	45	0
AZ100RYLNC	JT	MR144014	R3	CY7C1360C-166AXI	130	3.6	96	40	0
AZ100RUCLN	JT	MR144059	R1	CY7C1350G-200AXCT	130	3.63	96	30	0

Summary for Package Family: TQFP (Pb-Free)

51 records

1738 0

Sum

TSOP (Pb-free)

ZT28R2ABGN	JT	MR133035	R1	CY62256NLL-55ZXAT	130	7.0	128	29	0
ZT48AIALLC	G	MR134069	R1	CY62157EV30LL-45ZXI	130	5.5	128	27	0
ZT28R2ABGN	JT	MR141021	R1	CY62256NLL-55ZXAT	130	7.0	128	30	0
ZT32RAEDLN	RA	MR141032	R1	CG7517AAT	130	5.0	128	30	0
ZT32RBBALL	T	MR141048	R1	CY62128ELL-45ZXAT	130	3.6	96	30	0
ZT32RABALL	T	MR142026	R1	CY62128ELL-45ZXIT	130	3.6	96	28	0
ZT32RAEDLN	RA	MR142039	R1	CG7517AAT	130	3.6	96	30	0
ZT28R2BCLN	JT	MR142062	R1	CY62256NLL-55ZXI	130	7.0	96	30	0
ZT28R2ABGN	JT	MR143001	R1	CY62256NLL-55ZXAT	130	7.0	96	30	0
ZT32RBBALL	T	MR143053	R1	CY62128ELL-45ZXAT	130	3.6	96	30	0



ZT48AIALLC	G	MR144001	R3	CY62167EV30LL-45ZXI	130	5.5	96	40	0
ZT32RAEDLN	RA	MR144050	R1	CY62128EV30LL-45ZXIT	130	3.6	96	30	0
ZT28R2BCLN	JT	MR144051	R1	CY62256NLL-55ZXI	130	7.0	96	30	0
ZT32RABALL	T	MR144058	R1	CY62128ELL-45ZXI	130	3.6	96	25	0
Summary for Package Family: TSOP (Pb-free)				23	records				
Sum								419	0
TSOP I (Pb-Free)									
ZB32RHCALN	JT	MR141082	R1	CY62128EV30LL-45ZAXI	130	3.6	128	30	0
ZB32RHABLN	JT	MR142022	R1	CY62138FV30LL-45ZAXAT	130	3.6	128	30	0
ZB32RHABLN	JT	MR144025	R1	CY62138FV30LL-45ZAXAT	130	3.6	96	30	0
Summary for Package Family: TSOP I (Pb-Free)				3	records				
Sum								90	0
TSOP II (Pb-Free)									
ZW544AFLRC	G	114501	R3	CY14B116N-ZSP45XIES	130	5.5	96	28	0
ZW544AFLRC	G	114501	R3A	CY14E116N-ZSP45XIES	130	5.5	96	30	0
ZW544AFLRC	G	123003	R1	CY14B116N-ZSP45XIES	130	5.5	96	28	0
ZW544AFLRC	G	123003	R2	CY14E116N-ZSP45XIES	130	5.5	96	30	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	130	3.6	96	25	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	130	3.6	128	25	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	130	3.6	96	24	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	130	3.6	128	24	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	130	3.6	96	25	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	130	3.6	128	25	0
ZW44AMLNC	JT	141303	R2	CY62146ESL-45ZSXIJK	130	3.6	192	72	0
ZW44BRXAGL	G	142501	R1	FM22L16-55-TG	130	3.6	96	77	0
ZW544AALL	G	MR133056	R1	CY7C1061AV33-10ZXC	130	3.65	96	30	0



ZW44AXYAGL	RA	MR141012	R1	CY7C1041DV33-10ZSXI	130	3.65	128	30	0
ZW44AOLN	JT	MR141017	R1	CY62146EV30LL-45ZSXAT	130	3.6	96	30	0
ZW324CBLL	T	MR141073	R1	CY62148EV30LL-45ZSXAT	130	3.6	128	30	0
ZW44AOLN	JT	MR142008	R1	CY62146EV30LL-45ZSXAT	130	3.6	96	29	0
ZW324FBGL	T	MR142045	R1	CY7C1019CV33-10ZXA	130	3.3	128	23	0
ZW44AXYAGL	RA	MR143005	R1	CY7C1041DV33-10ZSXI	130	3.65	96	30	0
ZW44AOLN	JT	MR143036	R2	CY62146EV30LL-45ZSXAT	130	3.6	96	30	0
ZW44AYAGLC	RA	MR144010	R1	CY7C1041DV33-10ZSXI	130	3.65	96	30	0
ZW44WBBLNC	JT	MR144013	R1	CY7C1041DV33-10ZSXIT	130	3.65	96	40	0
ZW44WBBLNC	JT	MR144013	R2	CY7C1041DV33-10ZSXIT	130	3.65	96	40	0
ZW44WBBLNC	JT	MR144013	R3	CY7C1041DV33-10ZSXIT	130	3.65	96	40	0

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

24 records

795 0

Sum

TSSOP (Pb-Free)

ZZ0812BGL	T	MR141022	R1	CY2304NZZXI-1T	130	3.65	128	30	0
ZZ1620GBAN	RA	MR141060	R1	CY22393FXCT	130	3.63	96	30	0
ZZ1620GANC	RA	MR142043	R1	CY22394FXCT	130	3.63	96	30	0
ZZ1620GBAN	RA	MR143024	R1	CY22393FXCT	130	3.63	96	30	0
ZZ1620GBAN	RA	MR144021	R1	CY22393FXCT	130	3.63	96	30	0
ZZ1620GBAN	RA	MR151020	R1	CY22393FXCT	130	3.63	96	30	0

Summary for Package Family: TSSOP (Pb-Free)

6 records

180 0

Sum

**PLCC (Pb-Free)**

JZ28SBGAN	M	125107	R2	CY7B933-JXC	130	5.5	192	55	0
JZ32RGBAN	M	MR132007	R1	CY7B991V-5JXIT	130	3.6	128	30	0
JZ28SBGANC	M	MR141005	R3	CY7B933-JXI	130	5.5	128	45	0
JZ32RGBAN	M	MR141011	R1	CY7B991V-5JXI	130	3.6	128	30	0
Summary for Package Family: PLCC (Pb-Free)		4	records						
Sum							160	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)											
BK121DAGLC	G	MR141004	R1	CYUSB3031-BZXC	150	0	1000	29	0		
BK121DAGLC	G	MR141004	R2	CYUSB3014-BZXI	150	0	1000	29	0		
BK121DGAGL	G	MR141004	R3	CYUSB3014-BZXI	150	0	1000	30	0		
BK121DAGLC	G	MR141004	R4	CYUSB3014-BZXC	150	0	1000	30	0		
BK48PAALLC	RA	MR141027	R1	CY14V101LA-BA25XIT	150	0	500	30	0		
BK48PAALLC	RA	MR141027	R1	CY14V101LA-BA25XIT	150	0	1000	30	0		
BK121DGAGL	G	MR141031	R1	CG7648AMT	150	0	1000	30	0		
BK48MACALL	G	MR141047	R1	CY7C1041CV33-10BAJXET	150	0	1000	30	0		
BK48DLALL	G	MR141078	R1	CY62177EV30LL-55BAXI	150	0	500	30	0		
BK48DLALL	G	MR141078	R1	CY62177EV30LL-55BAXI	150	0	1000	30	0		
BK48DLALL	G	MR142012	R1	CY62177EV30LL-55BAXI	150	0	500	30	0		
BK48DLALL	G	MR142012	R1	CY62177EV30LL-55BAXI	150	0	1000	30	0		
BK121BGAGL	RA	MR142028	R1	CYUSB3014-BZXC	150	0	500	30	0		
BK121BGAGL	RA	MR142028	R1	CYUSB3014-BZXC	150	0	1000	30	0		
BK121DGAGL	G	MR142060	R1	CG7648AMT	150	0	500	30	0		
BK121DGAGL	G	MR142060	R1	CG7648AMT	150	0	1000	30	0		
BK48PAALL	RA	MR143012	R1	CY14V101LA-BA45XIT	150	0	500	30	0		
BK48NZAGLC	G	MR143049	R1	CY14B101LA-BA45XI	150	0	500	30	0		
BK48NZAGLC	G	MR144005	R1	CY14B101LA-BA45XI	150	0	500	30	0		
BK121BGAGL	RA	MR144006	R1	CG7983AMT	150	0	500	27	0		
BK121BGAGL	RA	MR144006	R1	CG7983AMT	150	0	1000	27	0		



BK121DGAGL	G	MR144022	R1	CYUSB3035-BZI	150	0	500	30	0
BK121DGAGL	G	MR144022	R1	CYUSB3035-BZI	150	0	1000	30	0

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

Sum	23	records	682	0
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FBGA (1.0-1.27)

BB165BCLLE	G	MR133057	R1	CY7C1354D-200BZC	150	0	1000	30	0
BB165BCLLE	G	MR134054	R1	CY7C1354D-200BZC	150	0	500	30	0
BB165BCLLE	G	MR134054	R1	CY7C1354D-200BZC	150	0	1000	30	0
BB165RJLEC	RA	MR134068	R2	CY7C1414KV18-250BZCKA	150	0	500	30	0
BB165RJLEC	RA	MR134068	R2	CY7C1414KV18-250BZCKA	150	0	1000	30	0
BB165AVLE	RA	MR141015	R1	CY7C1305TV25-167BZC	150	0	1000	30	0
BB165CWLEC	G	MR141029	R1	CY7C1313KV18-250BZC	150	0	1000	30	0
BB165AVLE	RA	MR142059	R1	CY7C1305TV25-167BZC	150	0	500	30	0
BB165AVLE	RA	MR142059	R1	CY7C1305TV25-167BZC	150	0	1000	30	0
BB165AVLE	RA	MR144019	R1	CY7C1305TV25-167BZC	150	0	500	30	0
BB165AVLE	RA	MR144019	R1	CY7C1305TV25-167BZC	150	0	1000	30	0

Summary for Package Family: FBGA (1.0-1.27)

Sum	11	records	330	0
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FBGA (1.0-1.27, Pb-free)

BW165BCALL	G	141002	R1	CY7C1361C-100BZXE	150	0	1000	80	0
BW165BCALL	G	141204	R1	CY7C1361C-100BZXE	150	0	1000	80	0
BW165CWLLC	G	MR141030	R1	CY7C1315KV18-250BZXC	150	0	1000	28	0
BW165CELLC	G	MR142007	R1	CY7C1418KV18-300BZXC	150	0	500	30	0
BW165CELLC	G	MR142007	R1	CY7C1418KV18-300BZXC	150	0	1000	30	0
BW165CWLLC	G	MR143004	R1	CY7C1313KV18-250BZI	150	0	500	30	0



BW165CWLLC	G	MR143004	R1	CY7C1313KV18-250BZXI	150	0	1000	30	0
BW165CALLC	G	MR144004	R1	CY7C1318KV18-250BZXC	150	0	500	30	0
BW165CALLC	G	MR144004	R1	CY7C1318KV18-250BZXC	150	0	1000	30	0
BW165CELLC	G	MR151012	R1	CY7C1414LV18-250BZXC	150	0	500	30	0

Summary for Package Family: FBGA (1.0-1.27, Pb-free) **10** **records**

Sum **398** **0**

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

BZ48ZEALEC	RA	MR141033	R1	CY62157EV18LL-55BVXIT	150	0	500	30	0
BZ48ZEALEC	RA	MR141033	R1	CY62157EV18LL-55BVXIT	150	0	1000	29	0
BZ48CEAALL	G	MR142021	R1	CY62147EV30LL-45BVXA	150	0	1000	30	0
BZ48ZEALEC	RA	MR142044	R1	CY62157EV30LL-45BVXIT	150	0	500	30	0
BZ48ZEALEC	RA	MR142044	R1	CY62157EV30LL-45BVXIT	150	0	1000	30	0
BZ48CFBALL	G	MR144024	R1	CY62157EV30LL-45BVXA	150	0	1000	30	0

Summary for Package Family: VFBGA **6** **records**

Sum **179** **0**

UFBGA (Pb-free)

BU60AAAAAL	G	MR141053	R1	CY8CTMA463-60BUIT	150	0	1000	30	0
BU60AAAAAL	G	MR142002	R1	CY8CTMA463-60BUIT	150	0	500	30	0
BU60AAAAAL	G	MR142002	R1	CY8CTMA463-60BUIT	150	0	1000	30	0

Summary for Package Family: UFBGA (Pb-free) **3** **records**

Sum **90** **0**

**FLIPCHIP CSP (Pb-Free)**

FN68AADRCD	DT	143002	R1	CY8C4247FNI-BL483	150	0	500	84	0
FN68AADRCD	DT	143002	R1	CY8C4247FNI-BL483	150	0	1000	84	0

Summary for Package Family: FLIPCHIP CSP (Pb-Free)**2 records****Sum****168 0****PDIP (Pb-Free)**

PZ083AAALL	UT	140501	R1	FM25V20A-PGES	125	0	1000	77	0
PZ083AAALL	UT	140501	R2	FM25V20A-PGES	125	0	1000	77	0
PZ083AAALL	UT	140501	R3	FM25V20A-PGES	125	0	1000	77	0
PZ183DPGNC	RA	MR141026	R1	CY7C63813-PXC	150	0	1000	30	0
PZ083AAALL	UT	MR141039	R1	FM25V20-PG	150	0	500	30	0
PZ286VFARC	M	MR142030	R1	CY62256NLL-70PXC	150	0	500	30	0
PZ286VFARC	M	MR142030	R1	CY62256NLL-70PXC	150	0	1000	30	0
PZ083AAALL	UT	MR142036	R1	FM25V20-PG	150	0	500	30	0
PZ083AAALL	UT	MR143027	R1	FM25V20-PG	150	0	500	30	0
PZ183DPGNC	RA	MR143032	R1	CS6632AF	150	0	500	30	0
PZ183DPGNC	RA	MR143032	R1	CS6632AF	150	0	1000	30	0
PZ083AAALL	UT	MR144039	R1	FM25V20-PG	150	0	500	30	0

Summary for Package Family: PDIP (Pb-Free)**12 records****Sum****501 0**

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

LG16AQAAAL	G	MR141019	R1	CG7745AAT	150	0	500	30	0
LG16AQAAAL	G	MR141019	R1	CG7745AAT	150	0	1000	30	0
LG16ARAARC	G	MR141034	R1	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R1	CY8C20075-24LKXIT	150	0	1000	45	0
LG16ARAARC	G	MR141034	R2	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R2	CY8C20075-24LKXIT	150	0	1000	45	0
LG16ARAARC	G	MR141034	R3	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R3	CY8C20075-24LKXIT	150	0	1000	45	0
LG16ARAARC	G	MR141034	R4	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R4	CY8C20075-24LKXIT	150	0	1000	45	0
LG16ARAARC	G	MR141034	R6	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R6	CY8C20075-24LKXIT	150	0	1000	45	0
LG16ARAARC	G	MR141034	R7	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R7	CY8C20075-24LKXIT	150	0	1000	45	0
LG16ARAARC	G	MR141034	R9	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R9	CY8C20075-24LKXIT	150	0	1000	45	0
LG16ARAARC	G	MR141034	R10	CY8C20075-24LKXIT	150	0	500	45	0
LG16ARAARC	G	MR141034	R10	CY8C20075-24LKXIT	150	0	1000	45	0
LG16AEPALC	RA	MR141042	R1	CY8C20075-24LKXIT	150	0	1000	45	0
LG16AEPALC	RA	MR141042	R2	CY8C20075-24LKXIT	150	0	1000	45	0
LG16AEPALC	RA	MR141042	R3	CY8C20075-24LKXIT	150	0	1000	45	0
LG16AEPALC	RA	MR141045	R1	CY8C20075-24LKXIT	150	0	500	30	0
LG16AEPALC	RA	MR141045	R1	CY8C20075-24LKXIT	150	0	1000	30	0
LG16ARAARC	G	MR142004	R1	CY8C20075-24LKXIT	150	0	500	30	0



LG16ARAARC	G	MR142004	R1	CY8C20075-24LKXIT	150	0	1000	30	0
LG16AQAAAL	G	MR143011	R1	CY8C20247-24LKXI	150	0	500	30	0
LG16AQAAAL	G	MR143011	R1	CY8C20247-24LKXI	150	0	1000	30	0
LG16ARAARC	G	MR143047	R1	CY8C20075-24LKXIT	150	0	500	30	0
LG16ARAARC	G	MR143047	R1	CY8C20075-24LKXIT	150	0	1000	30	0
LG16AQAAAL	G	MR144009	R1	CG7745AAT	150	0	500	30	0
LG16AQAAAL	G	MR144009	R1	CG7745AAT	150	0	1000	30	0
LG16AQAAAL	G	MR151018	R1	CG7602AAT	150	0	500	29	0

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

32 records

1244 0

QFN (Saw Type, Pb-Free)

LQ48AEAAAL	RA	132504	R1	CY8CTMA443-48LQIES4	150	0	500	80	0
LQ48AEAAAL	RA	132504	R1	CY8CTMA443-48LQIES4	150	0	1000	80	0
LQ24AQBARC	G	134802	R1	CYRF9935-24LQXCES	150	0	1000	84	0
LQ24AQBARC	G	134802	R2	CYRF9935-24LQXC	150	0	1000	84	0
LQ24AQBARC	G	134802	R3	CYRF9935-24LQXC	150	0	1000	80	0
LT40BQAAAL	G	135103	R1	CYRF69103-40LTXC	150	0	1000	80	0
LT88BBARC	UT	141304	R1	CYUSB3326-88LTXC	150	0	500	80	0
LT88BBARC	UT	141304	R1	CYUSB3326-88LTXC	150	0	1000	79	0
LT88BBARC	UT	141304	R1	CYUSB3326-88LTXC	150	0	1500	79	0
LQ16ABBALC	UT	141704	R1	CY8CMBR3108-LQXIES	150	0	1000	72	0
LQ16ABBALC	UT	141704	R2	CY8CMBR3108-LQXIES	150	0	1000	72	0
LQ24ABBALC	UT	141704	R3	CY8CMBR3116-LQXIES	150	0	500	82	0
LQ24ABBALC	UT	141704	R3	CY8CMBR3116-LQXIES	150	0	1000	70	0
LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	150	0	500	80	0



LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	150	0	1000	80	0
LQ24AABALC	RA	143205	R1	CY8C4014LQI-422	150	0	1000	78	0
LT32BAABGL	RA	MR134016	R1	CG7558AAT	150	0	1000	29	0
LQ44FQAALC	G	MR141013	R1	CY8CTMA442-44LQI	150	0	1000	30	0
LT40ABAALC	G	MR141020	R1	CG7380AM	150	0	500	30	0
LT40ABAALC	G	MR141020	R1	CG7380AM	150	0	1000	30	0
LQ48ABAALC	RA	MR141024	R1	CY8CTMA445-48LQIT	150	0	1000	30	0
LT68ADAAGL	RA	MR141046	R1	CY8C3246LTI-149T	150	0	500	30	0
LT68ADAAGL	RA	MR141046	R1	CY8C3246LTI-149T	150	0	1000	30	0
LQ48ABAALC	RA	MR142003	R1	CYTMA545-48LQI36AB	150	0	500	28	0
LQ48ABAALC	RA	MR142003	R1	CYTMA545-48LQI36AB	150	0	1000	28	0
LT56BEAGLC	RA	MR142049	R1	CS6651JAT	150	0	500	30	0
LT56BEAGLC	RA	MR142049	R1	CS6651JAT	150	0	1000	30	0
LT68GAAARC	G	MR143037	R1	CY8C3245LTI-163	150	0	500	30	0
LT68GAAARC	G	MR143037	R1	CY8C3245LTI-163	150	0	1000	30	0
LQ48ARAALC	G	MR143046	R1	CYTMA545-48LQI36ZZ	150	0	500	30	0
LQ48ARAALC	G	MR143046	R1	CYTMA545-48LQI36ZZ	150	0	1000	30	0
LQ48ABAALC	RA	MR143050	R1	CP8109ATT	150	0	500	30	0
LQ48ABAALC	RA	MR143050	R1	CP8109ATT	150	0	1000	30	0
LT56BPAAGL	RA	MR143056	R1	CS7275AAT	150	0	500	30	0
LQ48ABAALC	RA	MR144003	R1	CY8CTMA445-48LQIT	150	0	500	30	0
LQ48ABAALC	RA	MR144003	R1	CY8CTMA445-48LQIT	150	0	1000	30	0
LT56BEAGLC	RA	MR144035	R1	CY7C64215-56LTXCT	150	0	500	30	0
LT56BEAGLC	RA	MR144035	R1	CY7C64215-56LTXCT	150	0	1000	30	0
LQ40AAAALC	RA	MR151007	R1	CY8C4125LQI-483	150	0	500	30	0
LQ48AGAACLC	RA	MR151008	R1	CYTMA445A-48LQI36ZZT	150	0	500	30	0



LQ16ABBALC	UT	MR151013	R1	CG8356AAT	150	0	500	30	0
LQ16ABARC	G	MR151019	R1	CG8164AAT	150	0	500	30	0

Summary for Package Family: QFN (Saw Type, Pb-Free) **42 records**

Sum							2035	0
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QFN (Punch Type, Wettable Flank, Pb-Free)

LW56DGAZGL	L	MR141018	R1	CP7598AT	150	0	1000	29	0
LW56DGAZGL	L	MR142009	R1	CP7598AT	150	0	1000	30	0
LW56DGAZGL	L	MR143035	R1	CP7598ATT	150	0	1000	30	0

Summary for Package Family:
QFN (Punch Type, Wettable Flank, Pb-Free) **3 records**

Sum							89	0
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DFN , 0.8mm Thickness (Saw Type)

LH08DBAALL	UT	140503	R1	FM25V20A-DGES	125	0	1000	77	0
LH08DBAALL	UT	140503	R2	FM25V20A-DGES	125	0	1000	77	0
LH08DBAALL	UT	140503	R3	FM25V20A-DGES	125	0	1000	77	0
LH08AFAALL	UT	142503	R1	FM25V02-DG	150	0	500	77	0
LH08AFAALL	UT	142503	R1	FM25V02-DG	150	0	1000	77	0

Summary for Package Family: QFN (0.8mm Saw Type, Pb-Free) **5 records**

Sum							385	0
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**QSOP (Pb-Free)**

SQ2414ACGN	JT	MR134055	R1	CY7C63743C-QXC	150	0	500	30	0
SQ2414ACGN	JT	MR134055	R1	CY7C63743C-QXC	150	0	1000	30	0
SQ2414ACGN	JT	MR141044	R1	CY7C63823-QXC	150	0	500	29	0

Summary for Package Family: QSOP (Pb-Free) **3 records****Sum** **89 0****SNC (Pb-Free)**

SY2831BHN	JT	MR141007	R1	CY62256NLL-55SNXET	150	0	1000	30	0
SY2831AIHN	JT	MR143002	R1	CG7427AA	150	0	1000	28	0

Summary for Package Family: SNC (Pb-Free) **2 records****Sum** **58 0****SOIC (Pb Free)**

SW815JRALL	UT	141703	R1	FM24CL64B-GA	150	0	1000	80	0
SZ1615MAAL	RA	142306	R1	CY8C4014SXS-421	150	0	1000	80	0
SZ1615MAAL	RA	142306	R2	CY8C4014SXS-421	150	0	1000	80	0
SZ1615MAAL	RA	142306	R3	CY8C4014SXS-421	150	0	1000	80	0
SW815JRALL	UT	142502	R1	FM25V02-G	150	0	500	77	0
SW815JRALL	UT	142502	R1	FM25V02-G	150	0	1000	77	0
SW815JRALL	UT	142502	R2	FM25V02-G	150	0	500	77	0
SW815JRALL	UT	142502	R2	FM25V02-G	150	0	1000	77	0
SW815JRALL	UT	142502	R3	FM25V02-G	150	0	500	77	0
SW815JRALL	UT	142502	R3	FM25V02-G	150	0	1000	77	0
SZ815PAAAN	RA	142801	R1	FM24V01-G	150	0	500	77	0
SZ815PAAAN	RA	142801	R1	FM24V01-G	150	0	1000	77	0
SZ1615MAAL	RA	143003	R1	CY8C4014SXS-421	150	0	1000	80	0
SZ1615MAAL	RA	143003	R2	CY8C4014SXS-421	150	0	1000	80	0



SZ1615MAAL	RA	143003	R3	CY8C4014SXS-42I	150	0	1000	80	0
SZ32458LNC	JT	143703	R1	CY62128EV30LL-45SXIKJ	150	0	500	82	0
SZ32458LNC	JT	143703	R1	CY62128EV30LL-45SXIKJ	150	0	1000	72	0
SZ32458LNC	JT	143703	R2	CY62128EV30LL-45SXIKJ	150	0	500	77	0
SZ32458LNC	JT	143703	R2	CY62128EV30LL-45SXIKJ	150	0	1000	77	0
SZ32451LLC	JT	143703	R3	CY62148ELL-55SXIKJ	150	0	500	82	0
SZ32451LLC	JT	143703	R3	CY62148ELL-55SXIKJ	150	0	1000	71	0
SZ28AAAAAR	T	144904	R5	STK11C88-SF45I	150	0	1000	154	0
SZ183CPANC	RA	MR133039	R1	CY7C63813-SXCKP	150	0	1000	45	0
SZ183CPANC	RA	MR133039	R2	CY7C63813-SXCKA	150	0	1000	45	0
SZ24315EGN	RA	MR133044	R1	CP6604BMT	150	0	500	30	0
SZ24315EGN	RA	MR133044	R1	CP6604BMT	150	0	1000	30	0
SZ1615LDGN	RA	MR134043	R1	CY7C63803-SXCT	150	0	1000	30	0
SZ1615LDGN	RA	MR134043	R1	CY7C63803-SXCT	150	0	500	30	0
SZ323AEGAS	M	MR134046	R1	CY14B101LA-SZ45XIT	150	0	1000	30	0
SZ32451BLN	JT	MR134053	R1	CY7C53120E4-40SXIT	150	0	1000	30	0
SZ24315EGN	RA	MR141010	R1	CY7C63743C-SXC	150	0	500	30	0
SZ24315EGN	RA	MR141010	R1	CY7C63743C-SXC	150	0	1000	30	0
SZ323AGASC	M	MR141040	R1	CY14E256LA-SZ45XIT	150	0	500	45	0
SW815SRALL	LP	MR141025	R1	FM25C160B-GTR	150	0	500	30	0
SW815SRALL	LP	MR141025	R1	FM25C160B-GTR	150	0	1000	30	0
SZ815JRALL	UT	MR141036	R1	FM25CL64B-GTR	150	0	500	30	0
SZ815JRALL	UT	MR141036	R1	FM25CL64B-GTR	150	0	1000	30	0
SZ323AGASC	M	MR141040	R1	CY14E256LA-SZ45XIT	150	0	1000	45	0
SZ323AGASC	M	MR141040	R2	CY14E256LA-SZ45XI	150	0	500	45	0
SZ323AGASC	M	MR141040	R2	CY14E256LA-SZ45XI	150	0	1000	45	0



SZ24315GNC	RA	MR141041	R1	CY7C63823-SXCKA	150	0	1000	45	0
SZ24315GNC	RA	MR141041	R2	CY7C60223-SXCKA	150	0	1000	45	0
SZ24315GNC	RA	MR141041	R3	CY7C63743C-SXCKA	150	0	1000	45	0
SZ815HRALL	LP	MR141043	R1	FM25V01-GTR	150	0	500	30	0
SZ815HRALL	LP	MR141043	R1	FM25V01-GTR	150	0	1000	30	0
SZ28BNRALL	UT	MR141061	R1	FM28V020-SGTR	150	0	500	30	0
SZ1615FAL	T	MR141068	R1	CY8C20110-SX2I	150	0	500	30	0
SZ32451BLN	JT	MR141072	R1	CP7935ATT	150	0	500	30	0
SZ815HRALL	LP	MR142040	R1	FM25V01-GTR	150	0	500	30	0
SZ815HRALL	LP	MR142040	R1	FM25V01-GTR	150	0	1000	30	0
SZ28BNRALL	UT	MR142046	R1	FM28V020-SGTR	150	0	500	30	0
SZ815JRALL	UT	MR142054	R1	FM25CL64B-GTR	150	0	500	30	0
SZ815JRALL	UT	MR142054	R1	FM25CL64B-GTR	150	0	1000	30	0
SW815SRALL	LP	MR142057	R1	FM25C160B-GTR	150	0	500	30	0
SW815SRALL	LP	MR142057	R1	FM25C160B-GTR	150	0	1000	34	0
SZ32451BLN	JT	MR143017	R1	CP7896ATT	150	0	500	30	0
SZ1615FAL	T	MR143018	R1	CY8C20110-SX2I	150	0	500	30	0
SZ815HRALL	LP	MR143022	R1	FM25V01-GTR	150	0	500	30	0
SZ815HRALL	LP	MR143022	R1	FM25V01-GTR	150	0	1000	30	0
SW815SRALL	LP	MR143029	R1	FM25C160B-GTR	150	0	500	30	0
SW815SRALL	LP	MR143029	R1	FM25C160B-GTR	150	0	1000	30	0
SZ815JRALL	UT	MR143034	R1	FM25CL64B-GATR	150	0	500	30	0
SZ815JRALL	UT	MR143034	R1	FM25CL64B-GATR	150	0	1000	30	0
SZ28BNRALL	UT	MR143039	R1	FM28V020-SGTR	150	0	500	30	0
SZ24315DGN	RA	MR143051	R1	CY7C63823-SXC	150	0	500	30	0
SZ24315DGN	RA	MR143051	R1	CY7C63823-SXC	150	0	1000	30	0



SZ815HRALL	LP	MR144027	R1	FM25V01-GTR	150	0	500	30	0
SZ815HRALL	LP	MR144027	R1	FM25V01-GTR	150	0	1000	30	0
SW815SRALL	LP	MR144028	R1	CG8278AAT	150	0	500	30	0
SW815SRALL	LP	MR144028	R1	CG8278AAT	150	0	1000	30	0
SZ28BNRALL	UT	MR144033	R1	FM28V020-SGTR	150	0	500	30	0
SZ815JRALL	UT	MR144041	R1	FM25CL64B-GTR	150	0	500	30	0
SZ815JRALL	UT	MR144041	R1	FM25CL64B-GTR	150	0	1000	30	0
SZ815CGAAS	M	MR144046	R1	CY2305CSXA-1HT	150	0	1000	30	0
SZ183CPANC	RA	MR151021	R1	CY7C63813-SXC	150	0	500	30	0
SZ815HRALL	LP	MR151024	R1	FM25V01-GTR	150	0	500	30	0
SZ815JRALL	UT	MR151030	R1	FM25CL64B-GTR	150	0	500	30	0
SZ28BNRALL	UT	MR151032	R1	FM28V020-SGTR	150	0	500	30	0
SZ815JRALL	UT	MR151037	R1	FM25CL64B-GTR	150	0	500	30	0
SW815JRALL	UT	MR151040	R1	FM25C160B-GATR	150	0	500	30	0
SZ28BNRALL	UT	MR151041	R1	FM28V020-SGTR	150	0	500	30	0

Summary for Package Family: SOIC (Pb Free)

81 records

3700 0

Sum

SOJ (Pb-Free)

VZ32420LLC	JT	143704	R1	CY7C1019D-10VXIKJ	150	0	500	82	0
VZ32420LLC	JT	143704	R1	CY7C1019D-10VXIKJ	150	0	1000	72	0
VZ444ACLNC	JT	143704	R2	CY7C1021DV33-10VXIKJ	150	0	500	82	0
VZ444ACLNC	JT	143704	R2	CY7C1021DV33-10VXIKJ	150	0	1000	72	0
VZ444ACLNC	JT	143704	R3	CY7C1021DV33-10VXIKJ	150	0	500	85	0
VZ444ACLNC	JT	143704	R3	CY7C1021DV33-10VXIKJ	150	0	1000	83	0
VZ32314CLL	JT	MR141074	R1	CY7C1018DV33-10VXIT	150	0	500	30	0
VZ32314CLL	JT	MR141074	R1	CY7C1018DV33-10VXIT	150	0	1000	30	0



VZ32314CLL	JT	MR142011	R1	CY7C1018DV33-10VXIT	150	0	500	30	0
VZ32314CLL	JT	MR142011	R1	CY7C1018DV33-10VXIT	150	0	1000	30	0
VZ32314CLL	JT	MR143045	R1	CY7C1018DV33-10VXIT	150	0	500	30	0
VZ32314CLL	JT	MR143045	R1	CY7C1018DV33-10VXIT	150	0	1000	30	0

Summary for Package Family: SOJ (Pb-Free) **12** **records**

Sum							656	0
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SSOP (Pb-Free)

SP483ACANC	JT	143702	R1	CY8C20546A-24PVXIKJ	150	0	500	82	0
SP483ACANC	JT	143702	R1	CY8C20546A-24PVXIKJ	150	0	1000	72	0
SP483ACANC	JT	143702	R2	CY8C20546A-24PVXIKJ	150	0	500	85	0
SP483ACANC	JT	143702	R2	CY8C20546A-24PVXIKJ	150	0	1000	85	0
SP563DBGNC	JT	143702	R3	CY7C68013A-56PVXCKJ	150	0	500	82	0
SP563DBGNC	JT	143702	R3	CY7C68013A-56PVXCKJ	150	0	1000	72	0
SP2814GALC	T	MR133006	R1	CY8C27443-24PVXI	150	0	1000	45	0
SP2814GALC	T	MR133006	R2	CY8C27443-24PVXI	150	0	1000	45	0
SP2814GALC	T	MR133006	R3	CY8C27443-24PVXI	150	0	1000	45	0
SP202AAHAL	T	MR134064	R1	CY2CC810OXI-1T	150	0	1000	30	0
SP282ABGNC	RA	MR141055	R1	CY8C24533-24PVXI	150	0	500	30	0
SP282ABGNC	RA	MR141055	R1	CY8C24533-24PVXI	150	0	1000	30	0
SP563DBCNG	JT	MR141063	R1	CY7C68013A-56PVXC	150	0	500	30	0
SP563DBCNG	JT	MR141063	R1	CY7C68013A-56PVXC	150	0	1000	29	0
SP2024CAGL	M	MR142020	R1	CY8C21334-24PVXA	150	0	1000	30	0
SP483MBGNC	RA	MR142052	R2	CY8C29666-24PVXI	150	0	500	45	0
SP483MBGNC	RA	MR142052	R1	CY8C29666-24PVXI	150	0	500	45	0
SP483MBGNC	RA	MR142052	R2	CY8C29666-24PVXI	150	0	500	45	0
SP483MBGNC	RA	MR142052	R3	CY8C29666-24PVXI	150	0	500	45	0



SP483MBGNC	RA	MR142052	R3	CY8C29666-24PVXI	150	0	1000	45	0
SP282ABGNC	RA	MR142061	R1	CY8C24533-24PVXI	150	0	500	30	0
SP282ABGNC	RA	MR142061	R1	CY8C24533-24PVXI	150	0	1000	30	0
SP2023GALC	T	MR142064	R1	CG6865AST	150	0	500	30	0
SP2023GALC	T	MR142064	R1	CG6865AST	150	0	1000	30	0
SP2822BGL	M	MR143003	R1	CY8C21534-12PVXE	150	0	1000	30	0
SP282ABGNC	RA	MR143015	R1	CY8C24533-24PVXI	150	0	500	30	0
SP282ABGNC	RA	MR143015	R1	CY8C24533-24PVXI	150	0	1000	30	0
SP563DBCNG	JT	MR143055	R1	CG8082AM	150	0	500	30	0
SP282ABGNC	RA	MR144002	R1	CY8C24533-24PVXI	150	0	500	30	0
SP282ABGNC	RA	MR144002	R1	CY8C24533-24PVXI	150	0	1000	30	0
SP2024CAGL	M	MR144036	R1	CY8C21334-24PVXAT	150	0	1000	30	0

Summary for Package Family: SSOP (Pb-Free) **31** **records**

Sum							1347	0
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TQFP (Pb-Free)

AZ100RBLNC	JT	141302	R1	CY7C1370D-167AXCKJ	150	0	1000	80	0
AZ100RRDLL	JT	141302	R2	7C1490XC	150	0	1000	80	0
AZ100RRDLL	JT	141302	R2	7C1490XC	150	0	3000	72	0
AZ128SALLC	JT	141302	R3	CY7C68014A-128AXCKJ	150	0	1000	80	0
AZ48AAAAAS	T	144403	R1	CY8C4245AZI-483ES	150	0	500	79	0
AZ48AAAAAS	T	144403	R1	CY8C4245AZI-483ES	150	0	1000	79	0
AZ48BAAAAS	JT	144404	R1	CY8C4245AZI-483ES	150	0	500	77	0
AZ48BAAAAS	JT	144404	R1	CY8C4245AZI-483ES	150	0	1000	77	0
AZ64EXGALC	G	MR134052	R1	CY7C53150-20AXIT	150	0	500	30	0
AZ64EXGALC	G	MR134052	R1	CY7C53150-20AXIT	150	0	1000	30	0
AZ100RVLN	JT	MR134056	R1	CY7C68320C-100AXA	150	0	1000	30	0



AZ32LXGAN	L	MR134059	R1	CY29948AXIT	150	0	1000	30	0
AZ32LXGAN	L	MR134059	R1	CY29948AXIT	150	0	500	30	0
AZ100RUCLN	JT	MR141014	R1	CY7C1350G-200AXC	150	0	1000	30	0
AZ128BGALC	G	MR141028	R1	CY7C68013A-128AXC	150	0	1000	30	0
AZ100RPAGN	R	MR141069	R1	CY7C1354C-166AXC	150	0	500	30	0
AZ100RPAGN	R	MR141069	R1	CY7C1354C-166AXC	150	0	1000	30	0
AZ32LXGAN	L	MR141076	R1	CY29946AXIT	150	0	500	30	0
AZ64EXGAAL	G	MR142005	R1	CP5790DM	150	0	500	30	0
AZ100RUCLN	JT	MR142019	R1	CY7C1350G-200AXC	150	0	500	30	0
AZ100RUCLN	JT	MR142019	R1	CY7C1350G-200AXC	150	0	1000	30	0
AZ100RBCLN	JT	MR143041	R1	CY7C1370D-167AXI	150	0	500	30	0
AZ100RBCLN	JT	MR143041	R1	CY7C1370D-167AXI	150	0	1000	30	0
AZ100RUCLN	JT	MR143044	R1	CY7C1350G-200AXC	150	0	500	30	0
AZ100RUCLN	JT	MR143044	R1	CY7C1350G-200AXC	150	0	1000	30	0
AZ100RYLNC	JT	MR144014	R1	CY7C1360C-166AXI	150	0	500	45	0
AZ100RYLNC	JT	MR144014	R1	CY7C1360C-166AXI	150	0	1000	45	0
AZ100RYLNC	JT	MR144014	R2	CY7C1360C-166AXI	150	0	500	45	0
AZ100RYLNC	JT	MR144014	R2	CY7C1360C-166AXI	150	0	1000	45	0
AZ100RYLNC	JT	MR144014	R3	CY7C1360C-166AXI	150	0	500	45	0
AZ100RYLNC	JT	MR144014	R3	CY7C1360C-166AXI	150	0	1000	45	0
AZ100RUCLN	JT	MR144059	R1	CY7C1350G-200AXCT	150	0	500	30	0

Summary for Package Family: TQFP (Pb-Free)

32

records

1434 0

Sum

TSOP (Pb-free)

ZT48AKAALL	T	MR133011	R1	CY62167EV30LL-45ZXI	150	0	1000	30	0
ZT48AIALLC	G	MR134060	R1	CY62167ELL-45ZXI	150	0	500	30	0



ZT48AIALLC	G	MR134060	R1	CY62167ELL-45ZXI	150	0	1000	30	0
ZT48AIALLC	G	MR134069	R1	CY62157EV30LL-45ZXI	150	0	500	27	0
ZT48AIALLC	G	MR134069	R1	CY62157EV30LL-45ZXI	150	0	1000	27	0
ZT28R2ABGN	JT	MR141021	R1	CY62256NLL-55ZXAT	150	0	1000	30	0
ZT32RAEDLN	RA	MR141032	R1	CG7517AAT	150	0	1000	29	0
ZT32RBBALL	T	MR141048	R1	CY62128ELL-45ZXAT	150	0	1000	30	0
ZT32RABALL	T	MR142026	R1	CY62128ELL-45ZXIT	150	0	500	30	0
ZT32RABALL	T	MR142026	R1	CY62128ELL-45ZXIT	150	0	1000	30	0
ZT32RAEDLN	RA	MR142039	R1	CG7517AAT	150	0	500	30	0
ZT32RAEDLN	RA	MR142039	R1	CG7517AAT	150	0	1000	30	0
ZT28R2BCLN	JT	MR142062	R1	CY62256NLL-55ZXI	150	0	500	30	0
ZT28R2BCLN	JT	MR142062	R1	CY62256NLL-55ZXI	150	0	1000	30	0
ZT28R2ABGN	JT	MR143001	R1	CY62256NLL-55ZXAT	150	0	1000	30	0
ZT32RBBALL	T	MR143053	R1	CY62128ELL-45ZXAT	150	0	1000	30	0
ZT48AIALLC	G	MR144001	R1	CY62167EV30LL-45ZXI	150	0	500	45	0
ZT48AIALLC	G	MR144001	R2	CY62167EV30LL-45ZXIT	150	0	500	45	0
ZT48AIALLC	G	MR144001	R3	CY62167EV30LL-45ZXI	150	0	500	45	0
ZT32RAEDLN	RA	MR144050	R1	CY62128EV30LL-45ZXIT	150	0	500	30	0
ZT32RAEDLN	RA	MR144050	R1	CY62128EV30LL-45ZXIT	150	0	1000	30	0
ZT28R2BCLN	JT	MR144051	R1	CY62256NLL-55ZXI	150	0	500	30	0
ZT28R2BCLN	JT	MR144051	R1	CY62256NLL-55ZXI	150	0	1000	30	0
ZT32RABALL	T	MR144058	R1	CY62128ELL-45ZXI	150	0	500	26	0
ZT32RABALL	T	MR144058	R1	CY62128ELL-45ZXI	150	0	1000	26	0

Summary for Package Family: TSOP (Pb-free)

25

records

Sum

780 0

**TSOP I (Pb-Free)**

ZB32WRAAGL	G	MR141054	R1	FM28V100-TGTR	150	0	500	30	0
ZB32WRAAGL	G	MR141054	R1	FM28V100-TGTR	150	0	1000	30	0
ZB32RHCALN	JT	MR141082	R1	CY62128EV30LL-45ZAXI	150	0	500	30	0
ZB32RHCALN	JT	MR141082	R1	CY62128EV30LL-45ZAXI	150	0	1000	30	0
ZB32RHABLN	JT	MR142022	R1	CY62138FV30LL-45ZAXAT	150	0	1000	30	0
ZB32FRAAGL	G	MR142047	R1	FM28V100-TGTR	150	0	500	30	0
ZB32FRAAGL	G	MR142047	R1	FM28V100-TGTR	150	0	1000	30	0
ZB32FRAAGL	G	MR143030	R1	FM28V100-TG	150	0	500	30	0
ZB32RHABLN	JT	MR144025	R1	CY62138FV30LL-45ZAXAT	150	0	1000	30	0

Summary for Package Family: TSOP I (Pb-Free)**9 records****Sum** **270** **0****TSOP II (Pb-Free)**

ZW544AFLRC	G	123003	R1	CY14B116N-ZSP45XIES	150	0	1000	80	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	150	0	500	80	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	150	0	1000	80	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	150	0	1500	80	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	150	0	500	80	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	150	0	1000	80	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	150	0	1500	80	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	150	0	500	80	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	150	0	1000	80	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	150	0	1500	80	0
ZW444WBLNC	JT	141303	R1	CY7C1049DV33-10ZSXIJK	150	0	1000	80	0
ZW444AMLNC	JT	141303	R2	CY62146ESL-45ZSXIJK	150	0	1000	80	0
ZW444AMLNC	JT	141303	R2	CY62146ESL-45ZSXIJK	150	0	3000	71	0



ZW444AMLNC	JT	141303	R3	CY62147EV30LL-45ZSIKJ	150	0	1000	80	0
ZW444AIHLL	JT	MR134061	R1	CY7C1021DV33-10ZSXAT	150	0	1000	30	0
ZW44AXYAGL	RA	MR141012	R1	CY7C1041DV33-10ZSXI	150	0	1000	30	0
ZW444AOLN	JT	MR141017	R1	CY62146EV30LL-45ZSXA	150	0	1000	30	0
ZW44BRXAGL	G	MR141035	R1	FM22L16-55-TG	150	0	500	30	0
ZW324CBLL	T	MR141073	R1	CY62148EV30LL-45ZSXI	150	0	500	30	0
ZW324CBLL	T	MR141073	R1	CY62148EV30LL-45ZSXI	150	0	1000	30	0
ZW444AOLN	JT	MR142008	R1	CY62146EV30LL-45ZSXAT	150	0	1000	28	0
ZW324FBGL	T	MR142045	R1	CY7C1019CV33-10ZXA	150	0	500	30	0
ZW324FBGL	T	MR142045	R1	CY7C1019CV33-10ZXA	150	0	1000	30	0
ZW444ALLR	G	MR142053	R1	CY7C1051DV33-12ZSXI	150	0	500	30	0
ZW444ALLR	G	MR142053	R1	CY7C1051DV33-12ZSXI	150	0	1000	30	0
ZW44BRXAGL	G	MR142058	R1	FM22L16-55-TG	150	0	500	30	0
ZW44BRXAGL	G	MR142058	R1	FM22L16-55-TG	150	0	1000	30	0
ZW44AXYAGL	RA	MR143005	R1	CY7C1041DV33-10ZSXI	150	0	500	28	0
ZW44AXYAGL	RA	MR143005	R1	CY7C1041DV33-10ZSXI	150	0	1000	28	0
ZW44BRXAGL	G	MR143023	R1	FM22L16-55-TGTR	150	0	500	30	0
ZW444AOLN	JT	MR143036	R1	CY62146EV30LL-45ZSXA	150	0	1000	30	0
ZW44AYAGLC	RA	MR144010	R1	CY7C1041DV33-10ZSXI	150	0	500	30	0
ZW44AYAGLC	RA	MR144010	R1	CY7C1041DV33-10ZSXI	150	0	1000	30	0
ZW444WBLNC	JT	MR144013	R1	CY7C1041DV33-10ZSXIT	150	0	500	45	0
ZW444WBLNC	JT	MR144013	R1	CY7C1041DV33-10ZSXIT	150	0	1000	45	0
ZW444WBLNC	JT	MR144013	R2	CY7C1041DV33-10ZSXIT	150	0	500	45	0
ZW444WBLNC	JT	MR144013	R2	CY7C1041DV33-10ZSXIT	150	0	1000	45	0
ZW444WBLNC	JT	MR144013	R3	CY7C1041DV33-10ZSXIT	150	0	500	45	0
ZW444WBLNC	JT	MR144013	R3	CY7C1041DV33-10ZSXIT	150	0	1000	45	0



ZW444AOLN	JT	MR144023	R1	CY62146EV30LL-45ZSX ^A	150	0	1000	28	0
ZW44BRXAGL	G	MR144026	R1	FM22L16-55-TG	150	0	500	30	0
ZW324GALL	T	MR144052	R1	CY7C1019DV33-10ZSXIT	150	0	500	30	0
ZW324GALL	T	MR144052	R1	CY7C1019DV33-10ZSXIT	150	0	1000	30	0
ZW444ALLR	G	MR144056	R1	CY7C1059DV33-10ZSXI	150	0	500	30	0

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

44 records

Sum							2093	0
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TSSOP (Pb-Free)

ZZ0812BGL	T	MR134063	R1	CY2304NZZXI-1T	150	0	1000	30	0
ZZ0812BGL	T	MR141022	R1	CY2304NZZXI-1T	150	0	500	30	0
ZZ0812BGL	T	MR141022	R1	CY2304NZZXI-1T	150	0	1000	29	0
ZZ1620GBAN	RA	MR141060	R1	CY22393FXCT	150	0	500	30	0
ZZ1620GBAN	RA	MR141060	R1	CY22393FXCT	150	0	1000	30	0
ZZ2014BGN	T	MR142027	R1	CG7734AAT	150	0	500	30	0
ZZ2014BGN	T	MR142027	R1	CG7734AAT	150	0	1000	30	0
ZZ0812BGL	T	MR142029	R1	CY2304NZZXI-1T	150	0	500	30	0
ZZ0812BGL	T	MR142029	R1	CY2304NZZXI-1T	150	0	1000	30	0
ZZ1620GANC	RA	MR142043	R1	CY22394FXCT	150	0	500	30	0
ZZ1620GANC	RA	MR142043	R1	CY22394FXCT	150	0	1000	30	0
ZZ1620GBAN	RA	MR143024	R1	CY22393FXCT	150	0	500	30	0
ZZ1620GBAN	RA	MR143024	R1	CY22393FXCT	150	0	1000	30	0
ZZ0812BGL	T	MR143038	R1	CY2304NZZXI-1T	150	0	500	30	0
ZZ2014BGN	T	MR144007	R1	CG7732AAT	150	0	500	30	0
ZZ2014BGN	T	MR144007	R1	CG7732AAT	150	0	1000	30	0



ZZ1620GBAN	RA	MR144021	R1	CY22393FXCT	150	0	500	30	0
ZZ1620GBAN	RA	MR144021	R1	CY22393FXCT	150	0	1000	28	0
ZZ0812BGL	T	MR144037	R1	CY2304NZZXC-1T	150	0	500	30	0
ZZ1620GBAN	RA	MR151020	R1	CY22393FXCT	150	0	500	30	0

Summary for Package Family: TSSOP (Pb-Free) **20** **records**

Sum **597** **0**

PLCC (Pb-Free)

JZ28SBGANC	M	MR141005	R1	CY7B933-JXI	150	0	1000	45	0
JZ28SBGANC	M	MR141005	R2	CY7B933-JXI	150	0	1000	45	0
JZ28SBGANC	M	MR141005	R3	CY7B933-JXI	150	0	1000	45	0
JZ32RBGAN	M	MR141011	R1	CY7B991V-5JXI	150	0	1000	18	0
JZ32RBGAN	M	MR141011	R1	CY7B991V-5JXI	150	0	500	18	0

Summary for Package Family: PLCC (Pb-Free) **5** **records**

Sum 171 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)											
BK48DJALL	G	135002	R5	CY62177DV30LL-55BAXI	121	0	168	80	0		
BK48DJALL	G	135002	R5	CY62177DV30LL-55BAXI	121	0	288	80	0		
BK48DJALL	G	135002	R6	CY62177DV30LL-55BAXI	121	0	168	80	0		
BK48DJALL	G	135002	R6	CY62177DV30LL-55BAXI	121	0	288	80	0		
BK48DJALL	G	135002	R7	CY62177DV30LL-55BAXI	121	0	168	78	0		
BK48DJALL	G	135002	R7	CY62177DV30LL-55BAXI	121	0	288	78	0		
BK48DJALL	G	135002	R8	CY62177DV30LL-55BAXI	121	0	168	77	0		
BK48DJALL	G	135002	R8	CY62177DV30LL-55BAXI	121	0	288	77	0		
BK48PAALL	RA	143807	R1	CY14B104NA-BA45XI	121	0	168	79	0		
BK48PAALL	RA	143807	R2	CY14B104NA-BA45XI	121	0	168	80	0		
BK121DAGLC	G	MR141004	R1	CYUSB3031-BZXC	121	0	288	27	0		
BK121DAGLC	G	MR141004	R2	CYUSB3014-BZXI	121	0	288	30	0		
BK121DGAGL	G	MR141004	R3	CYUSB3014-BZXI	121	0	288	30	0		
BK121DAGLC	G	MR141004	R4	CYUSB3014-BZXC	121	0	288	30	0		
BK48PAALLC	RA	MR141027	R1	CY14V101LA-BA25XIT	121	0	288	29	0		
BK48MACALL	G	MR141047	R1	CY7C1041CV33-10BAJXET	121	0	96	30	0		
BK48MACALL	G	MR141047	R1	CY7C1041CV33-10BAJXET	121	0	168	30	0		
BK48DLALL	G	MR141078	R1	CY62177EV30LL-55BAXI	121	0	288	26	0		
BK48DLALL	G	MR142012	R1	CY62177EV30LL-55BAXI	121	0	168	30	0		
BK121BGAGL	RA	MR142028	R1	CYUSB3014-BZXC	121	0	168	30	0		



BK121DGAGL	G	MR142060	R1	CG7648AMT	121	0	168	30	0
BK48PAALL	RA	MR143012	R1	CY14V101LA-BA45XIT	121	0	168	30	0
BK48NZAGLC	G	MR143049	R1	CY14B101LA-BA45XI	121	0	168	30	0
BK121BGAGL	RA	MR144006	R1	CG7983AMT	121	0	168	27	0
BK121DGAGL	G	MR144022	R1	CYUSB3035-BZXI	121	0	168	30	0
Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)				25	records				
Sum							1228	0	

FBGA (1.0-1.27)

BB165RJLEC	RA	MR134068	R3	CY7C1414KV18-300BZCKA	121	0	168	30	0
BB165XALEC	G	MR142048	R2	CY7C1315KV18-250BZC	121	0	168	30	0
BB165AVLE	RA	MR142059	R1	CY7C1305TV25-167BZC	121	0	168	30	0
BB165AVLE	RA	MR144019	R1	CY7C1305TV25-167BZC	121	0	168	30	0

Summary for Package Family: FBGA (1.0-1.27)

Sum				4	records				
							120	0	

FBGA (1.0-1.27, Pb-free)

BW165BCALL	G	141002	R1	CY7C1361C-100BZXE	121	0	96	80	0
BW165BCALL	G	141002	R1	CY7C1361C-100BZXE	121	0	168	80	0
BW165BCALL	G	141002	R2	CY7C1361C-100BZXE	121	0	96	80	0
BW165BCALL	G	141002	R2	CY7C1361C-100BZXE	121	0	168	80	0
BW165BCALL	G	141002	R3	CY7C13451G-100BZXE	121	0	96	80	0
BW165BCALL	G	141002	R3	CY7C13451G-100BZXE	121	0	168	80	0
BW165BCALL	G	141204	R1	CY7C1361C-100BZXE	121	0	96	80	0
BW165BCALL	G	141204	R1	CY7C1361C-100BZXE	121	0	168	80	0
BW165BCALL	G	141204	R2	CY7C1361C-100BZXE	121	0	96	80	0
BW165BCALL	G	141204	R2	CY7C1361C-100BZXE	121	0	168	80	0



BW165BCALL	G	141204	R3	CY7C13451G-100BZXE	121	0	96	80	0
BW165BCALL	G	141204	R3	CY7C13451G-100BZXE	121	0	168	80	0
BW165CELLC	G	MR142007	R1	CY7C1418KV18-300BZXC	121	0	168	30	0
BW165CWLLC	G	MR143004	R1	CY7C1313KV18-250BZXI	121	0	168	30	0
BW165CALLC	G	MR144004	R1	CY7C1318KV18-250BZXC	121	0	168	30	0
BW165CALLC	G	MR144004	R1	CY7C1318KV18-250BZXC	121	0	288	29	0
BW165CELLC	G	MR151012	R1	CY7C1414LV18-250BZXC	121	0	168	30	0
Summary for Package Family: FBGA (1.0-1.27, Pb-free)				17	records			1109	0
FCBGA									
FR361BALL	G	140604	R1	CY7C4121KV13-600FCXC	121	0	168	77	0
FR361BALL	G	140604	R1	CY7C4121KV13-600FCXC	121	0	288	77	0
Summary for Package Family: FCBGA				2	records				
Sum								154	0
VFBGA (0.75-0.8, 0.3mm, Pb-Free)									
BZ48ARDLLC	RA	124902	R5B	CY7C1061G30-10BVXIES	121	0	168	80	0
BZ48ARDLLC	RA	124902	R5B	CY7C1061G30-10BVXIES	121	0	288	79	0
BZ100FALLC	G	150701	R1	CYUSB3304-BVXCES	121	0	168	80	0
BZ100FALLC	G	150701	R2	CYUSB3328-BVXCES	121	0	168	80	0
BZ48ZEALEC	RA	MR141033	R1	CY62157EV18LL-55BVXIT	121	0	288	22	0
BZ48CEAALL	G	MR142021	R1	CY62147EV30LL-45BVXA	121	0	96	30	0
BZ48CEAALL	G	MR142021	R1	CY62147EV30LL-45BVXA	121	0	168	30	0
BZ48ZEALEC	RA	MR142044	R1	CY62157EV30LL-45BVXIT	121	0	168	30	0



BZ48CFBALL	G	MR144024	R1	CY62157EV30LL-45BVXA	121	0	96	30	0
BZ48CFBALL	G	MR144024	R1	CY62157EV30LL-45BVXA	121	0	168	30	0
BZ48ZEALEC	RA	MR144060	R1	CY62157EV18LL-55BVXIT	121	0	168	30	0
Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)			11	records					
	Sum						521	0	

UFBGA (Pb-free)

BU48AAAALC	G	142004	R4	CYTMA525-48BUI25ZZEST	121	0	168	78	0
BU48AAAALC	G	142004	R5	CYTMA525-48BUI25ZZEST	121	0	168	80	0
BU60AAAAAL	G	MR141053	R1	CY8CTMA463-60BUIT	121	0	288	30	0

Summary for Package Family: UFBGA (Pb-free)

3 records

Sum **188 0**

FLIPCHIP CSP (Pb-Free)

FN68AADRCD	DT	143002	R3	CY8C4247FNI-BL483	121	0	168	82	0
FN68AADRCD	DT	143002	R3	CY8C4247FNI-BL483	121	0	288	82	0

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

2 records

Sum **164 0**

PDIP (Pb-Free)

PZ083AAALL	UT	MR141039	R1	FM25V20-PG	121	0	168	29	0
PZ286VFARC	M	MR142030	R1	CY62256NLL-70PXC	121	0	168	30	0
PZ083AAALL	UT	MR142036	R1	FM25V20-PG	121	0	168	30	0
PZ183DPGN	RA	MR143032	R1	CS6632AF	150	0	168	28	0



PZ183DPGNC	RA	MR143032	R1	CS6632AF	150	0	288	28	0
PZ083AAALL	UT	MR144039	R1	FM25V20-PG	121	0	168	30	0
PZ083AAALL	UT	MR151042	R1	FM25V20-PG	121	0	168	30	0
Sum			7					205	0

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

LG16AQAAAL	G	MR141019	R1	CG7745AAT	121	0	288	25	0
LG16ARAARC	G	MR141034	R1	CY8C20075-24LKXIT	121	0	288	45	0
LG16ARAARC	G	MR141034	R2	CY8C20075-24LKXIT	121	0	288	44	0
LG16ARAARC	G	MR141034	R3	CY8C20075-24LKXIT	121	0	288	45	0
LG16ARAARC	G	MR141034	R4	CY8C20075-24LKXIT	121	0	288	45	0
LG16ARAARC	G	MR141034	R5	CY8C20075-24LKXIT	121	0	288	45	0
LG16ARAARC	G	MR141034	R6	CY8C20075-24LKXIT	121	0	288	45	0
LG16ARAARC	G	MR141034	R7	CY8C20075-24LKXIT	121	0	288	45	0
LG16ARAARC	G	MR141034	R9	CY8C20075-24LKXIT	121	0	288	43	0
LG16ARAARC	G	MR141034	R10	CY8C20075-24LKXIT	121	0	288	45	0
LG16AEPALC	RA	MR141042	R1	CY8C20075-24LKXIT	121	0	288	45	0
LG16AEPALC	RA	MR141042	R2	CY8C20075-24LKXIT	121	0	288	44	0
LG16AEPALC	RA	MR141042	R3	CY8C20075-24LKXIT	121	0	288	45	0
LG16AEPALC	RA	MR141045	R1	CY8C20075-24LKXIT	121	0	288	30	0
LG16AEPALC	RA	MR141045	R1	CY8C20075-24LKXIT	121	0	168	30	0
LG16ARAARC	G	MR142004	R1	CY8C20075-24LKXIT	121	0	168	29	0
LG16ARAARC	G	MR142004	R1	CY8C20075-24LKXIT	121	0	288	25	0
LG16AQAAAL	G	MR143011	R1	CY8C20247-24LKXI	121	0	168	30	0
LG16AQAAAL	G	MR143011	R1	CY8C20247-24LKXI	121	0	288	30	0



LG16ARAARC	G	MR143047	R1	CY8C20075-24LKXIT	121	0	168	30	0
LG16ARAARC	G	MR143047	R1	CY8C20075-24LKXIT	121	0	288	29	0
LG16AQAAAL	G	MR144009	R1	CG7745AAT	121	0	168	30	0
LG16AQAAAL	G	MR144009	R1	CG7745AAT	121	0	288	30	0
LG16AQAAAL	G	MR151018	R1	CG7602AAT	121	0	168	30	0
Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)				24	records				
Sum							884	0	

QFN (Saw Type, Pb-Free)

LQ48AEAAAL	RA	132504	R1	CY8CTMA443-48LQIES4	121	0	168	80	0
LQ48AEAAAL	RA	132504	R1	CY8CTMA443-48LQIES4	121	0	288	80	0
LQ24AQBARC	G	134802	R3	CYRF9935-24LQXC	121	0	168	80	0
LQ24AQBARC	G	134802	R3	CYRF9935-24LQXC	121	0	288	80	0
LT40BQAAAL	G	135103	R1	CYRF69103-40LTXC	121	0	288	80	0
LT40BQAAAL	G	135103	R2	CYRF69103-40LTXC	121	0	288	77	0
LT40BQAAAL	G	135103	R2	CYRF69103-40LTXC	121	0	288	77	0
LQ16AAAALC	RA	140404	R1	CY8CMBR31085CP-LQXIKA	121	0	168	80	0
LQ48AGAACLC	RA	140504	R2	CYTMA445A-48TCES	121	0	168	76	0
LQ48AGAACLC	RA	140504	R2	CYTMA445A-48TCES	121	0	288	76	0
LQ48AGAACLC	RA	140902	R2	CYTMA445A-48TCES	121	0	168	76	0
LQ48AGAACLC	RA	140902	R2	CYTMA445A-48TCES	121	0	288	76	0
LQ48AGAACLC	RA	140902	R3	CYTMA445A-48TCES	121	0	168	77	0
LQ48AGAACLC	RA	140902	R3	CYTMA445A-48TCES	121	0	288	77	0
LQ48AGAACLC	RA	140902	R4	CYTMA445A-48TCES	121	0	168	76	0
LQ44AGAACLC	RA	140903	R1	CYTMA445A-44TCES	121	0	168	80	0
LQ44AGAACLC	RA	140903	R1	CYTMA445A-44TCES	121	0	288	78	0



LQ44AGAALC	RA	140903	R2	CYTMA445A-44TCES	121	0	168	79	0
LQ44AGAALC	RA	140903	R2	CYTMA445A-44TCES	121	0	288	75	0
LQ44AGAALC	RA	140903	R3	CYTMA445A-44TCES	121	0	168	79	0
LQ44AGAALC	RA	140903	R3	CYTMA445A-44TCES	121	0	288	79	0
LQ48AHAARC	G	140904	R1A	CYTMA445A-48TCES	121	0	168	68	0
LQ48AHAARC	G	140904	R2A	CYTMA445A-48TCES	121	0	168	77	0
LQ48AHAARC	G	140904	R3A	CYTMA445A-48TCES	121	0	168	56	0
LQ44AHAARC	G	140905	R1	CYTMA445A-44TCES	121	0	168	80	0
LQ44AHAARC	G	140905	R1	CYTMA445A-44TCES	121	0	288	80	0
LQ44AHAARC	G	140905	R2	CYTMA445A-44TCES	121	0	168	78	0
LQ44AHAARC	G	140905	R2	CYTMA445A-44TCES	121	0	288	78	0
LQ44AHAARC	G	140905	R3	CYTMA445A-44TCES	121	0	168	79	0
LQ44AHAARC	G	140905	R3	CYTMA445A-44TCES	121	0	288	79	0
LT88BBARC	UT	141304	R1	CYUSB3326-88LTXC	121	0	168	80	0
LQ48ADAAAL	G	141503	R1	CY8CTMA443-48LQIES2	121	0	168	77	0
LQ48ADAAAL	G	141503	R1	CY8CTMA443-48LQIES2	121	0	288	77	0
LQ48ADAAAL	G	141503	R2	CY8CTMA443-48LQIES2	121	0	168	77	0
LQ48ADAAAL	G	141503	R2	CY8CTMA443-48LQIES2	121	0	288	77	0
LQ48ADAAAL	G	141503	R3	CY8CTMA443-48LQIES2	121	0	168	77	0
LQ48ADAAAL	G	141503	R3	CY8CTMA443-48LQIES2	121	0	288	77	0
LQ56BDAARC	RA	141602	R1	CYTMA568-56LQI44ZXES	121	0	168	79	0
LQ16AAAALC	RA	141604	R1	CY8CMBR3145-LQXI	121	0	168	80	0
LQ16AAAALC	RA	141604	R1	CY8CMBR3145-LQXI	121	0	288	79	0
LQ56BDAARC	RA	141604	R2	CYTMA568-56LQI44AB	121	0	168	77	0
LQ56BDAARC	RA	141604	R2	CYTMA568-56LQI44AB	121	0	288	77	0
LT68ADAAGL	RA	141604	R3	CY8C3866LTI-209	121	0	168	77	0



LT68ADAAGL	RA	141604	R3	CY8C3866LTI-209	121	0	288	77	0
LQ40AAAALC	RA	141702	R1	CY8C4245LQI-483	121	0	168	80	0
LQ40AAAALC	RA	141702	R1	CY8C4245LQI-483	121	0	288	80	0
LQ40AAAALC	RA	141702	R2	CY8C4245LQI-483	121	0	168	80	0
LQ40AAAALC	RA	141702	R2	CY8C4245LQI-483	121	0	288	80	0
LQ40AAAALC	RA	141702	R3	CY8C4245LQI-483	121	0	168	80	0
LQ40AAAALC	RA	141702	R3	CY8C4245LQI-483	121	0	288	80	0
LQ16ABBALC	UT	141704	R4	CY8CMR3145-LQXIES	121	0	168	78	0
LQ24ABBALC	UT	141704	R5	CY8CMR3116-LQXIES	121	0	168	78	0
LQ24ABBALC	UT	141704	R5	CY8CMR3116-LQXIES	121	0	288	68	0
LQ56AAAALC	RA	141901	R2	CY8C4247LQI-BL483ES	121	0	168	79	0
LQ48ABAALC	RA	141906	R1	CYTMA445-48LQI36ZZAES	121	0	168	80	0
LQ48ABAALC	RA	141906	R1	CYTMA445-48LQI36ZZAES	121	0	288	80	0
LQ48ABAALC	RA	141906	R2	CYTMA445-48LQI36ZZAES	121	0	168	80	0
LQ48ABAALC	RA	141906	R2	CYTMA445-48LQI36ZZAES	121	0	288	80	0
LQ16ABARC	G	142201	R1	CY8CMR31085-LQXIKG	121	0	168	80	0
LQ16ABARC	G	142201	R1	CY8CMR31085-LQXIKG	121	0	288	80	0
LQ16ABARC	G	142201	R2	CY8CMR31085-LQXIKG	121	0	168	80	0
LQ16ABARC	G	142201	R2	CY8CMR31085-LQXIKG	121	0	288	80	0
LQ16ABARC	G	142201	R3	CY8CMR31085-LQXIKG	121	0	168	80	0
LQ16ABARC	G	142201	R3	CY8CMR31085-LQXIKG	121	0	288	80	0
LQ16AAAALC	RA	142303	R1	CY8CMR3116-LQXI	121	0	168	80	0
LQ16AAAALC	RA	142304	R1	CY8C4014LQI-422	121	0	168	80	0
LQ56AAAALC	RA	143004	R1	CY8C4247LQI-BL483ES	121	0	168	80	0
LQ56AAAALC	RA	143004	R1	CY8C4247LQI-BL483ES	121	0	288	80	0
LQ56AAAALC	RA	143004	R2	CYBL10563-56LQXIES	121	0	168	80	0



LQ56AAAALC	RA	143004	R3	CYBL10162-56LQXIES	121	0	168	80	0
LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	121	0	176	80	0
LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	121	0	288	80	0
LQ24ABAALC	RA	143203	R3	CYRF9935-24LQXC	121	0	168	80	0
LQ24ABAALC	RA	143203	R3	CYRF9935-24LQXC	121	0	288	80	0
LQ24ABAALC	RA	143203	R4	CYRF9935-24LQXC	121	0	168	80	0
LQ24ABAALC	RA	143203	R4	CYRF9935-24LQXC	121	0	288	80	0
LQ24AABALC	RA	143205	R1	CY8C4014LQI-422	121	0	96	80	0
LQ24AABALC	RA	143205	R1	CY8C4014LQI-422	121	0	168	80	0
LQ24AABALC	RA	143205	R2	CY8C4014LQI-422	121	0	96	80	0
LQ24AABALC	RA	143205	R2	CY8C4014LQI-422	121	0	168	80	0
LQ24AABALC	RA	143205	R3	CY8C4014LQI-422	121	0	96	80	0
LQ24AABALC	RA	143205	R3	CY8C4014LQI-422	121	0	168	80	0
LQ24AABAAL	RA	143205	R4	CY8C4014LQS-422	121	0	96	80	0
LQ24AABAAL	RA	143205	R5	CY8C4014LQS-422	121	0	96	80	0
LQ24AABAAL	RA	143205	R6	CY8C4014LQS-422	121	0	96	80	0
LQ48ABAALC	RA	144605	R1	CYTMA445-48LQI36AE	121	0	168	40	0
LQ48ABAALC	RA	144605	R1	CYTMA445-48LQI36AE	121	0	288	40	0
LQ48ABAALC	RA	144605	R2	CYTMA445-48LQI36AE	121	0	168	40	0
LQ48ABAALC	RA	144605	R2	CYTMA445-48LQI36AE	121	0	288	40	0
LQ48ABAALC	RA	144605	R3	CYTMA445-48LQI36AE	121	0	168	40	0
LQ48ABAALC	RA	144605	R3	CYTMA445-48LQI36AE	121	0	288	40	0
LQ48AHAARC	G	145004	R3	CYTMA445A-48TCES	121	0	168	75	0
LQ48AHAARC	G	145004	R3	CYTMA445A-48TCES	121	0	288	74	0
LQ48AHAARC	G	145004	R3_Split 2	CYTMA445A-48TCES	121	0	168	2	0
LQ48AHAARC	G	145004	R3_Split 2	CYTMA445A-48TCES	121	0	288	2	0



LQ48AHAARC	G	145004	R4	CYTMA445A-48TCES	121	0	168	74	0
LQ48AHAARC	G	145004	R4	CYTMA445A-48TCES	121	0	288	72	0
LQ48AHAARC	G	145004	R4_Split 2	CYTMA445A-48TCES	121	0	168	5	0
LQ48AHAARC	G	145004	R4_Split 2	CYTMA445A-48TCES	121	0	288	5	0
LQ48AHAARC	G	145004	R5	CYTMA445A-48TCES	121	0	288	69	0
LQ48AHAARC	G	145004	R5_Split 2	CYTMA445A-48TCES	121	0	168	8	0
LQ48AHAARC	G	145004	R5_Split 2	CYTMA445A-48TCES	121	0	288	8	0
LQ48AGAACLC	RA	145007	R3	CYTMA445A-48TCES	121	0	168	76	0
LQ48AGAACLC	RA	145007	R3	CYTMA445A-48TCES	121	0	288	76	0
LQ48AGAACLC	RA	145007	R4	CYTMA445A-48TCES	121	0	168	77	0
LQ48AGAACLC	RA	145007	R4	CYTMA445A-48TCES	121	0	288	77	0
LQ48AGAACLC	RA	145007	R5	CYTMA445A-48TCES	121	0	168	76	0
LQ48AGAACLC	RA	145007	R5	CYTMA445A-48TCES	121	0	288	76	0
LT68BAAALC	RA	150404	R1	CYUSB3304-68LTXC	121	0	168	77	0
LT68BAAALC	RA	150404	R1	CYUSB3304-68LTXC	121	0	288	77	0
LT68BAAALC	RA	150404	R2	CYUSB3304-68LTXC	121	0	168	77	0
LT68BAAALC	RA	150404	R2	CYUSB3304-68LTXC	121	0	288	77	0
LT68BAAALC	RA	150404	R3	CYUSB3304-68LTXC	121	0	168	75	0
LT68BAAALC	RA	150404	R3	CYUSB3304-68LTXC	121	0	288	75	0
LT40ABAALC	G	MR141020	R1	CG7380AM	121	0	168	30	0
LQ48ABAALC	RA	MR141024	R1	CY8CTMA445-48LQIT	121	0	288	29	0
LT68ADAAGL	RA	MR141046	R1	CY8C3246LTI-149T	121	0	176	30	0
LT68ADAAGL	RA	MR141046	R1	CY8C3246LTI-149T	121	0	288	25	0
LT68ADAAGL	RA	MR141046	R1	CY8C3246LTI-149T	121	0	288	5	0
LQ48ABAALC	RA	MR142003	R1	CYTMA545-48LQI36AB	121	0	168	30	0
LQ48ABAALC	RA	MR142003	R1	CYTMA545-48LQI36AB	121	0	288	30	0



LT56BEAGLC	RA	MR142049	R1	CS6651JAT	121	0	168	30	0
LT68GAAARC	G	MR143037	R1	CY8C3245LTI-163	121	0	168	30	0
LT68GAAARC	G	MR143037	R1	CY8C3245LTI-163	121	0	288	30	0
LQ48ARAALC	G	MR143046	R1	CYTMA545-48LQI36ZZ	121	0	168	30	0
LQ48ARAALC	G	MR143046	R1	CYTMA545-48LQI36ZZ	121	0	288	30	0
LQ48ABAALC	RA	MR143050	R1	CP8109ATT	121	0	168	30	0
LQ48ABAALC	RA	MR143050	R1	CP8109ATT	121	0	288	30	0
LT56BPAAGL	RA	MR143056	R1	CS7275AAT	121	0	168	30	0
LQ48ABAALC	RA	MR144003	R1	CY8CTMA445-48LQIT	121	0	168	30	0
LQ40AAAALC	RA	MR151007	R1	CY8C4125LQI-483	121	0	168	28	0
LQ48AGAACLC	RA	MR151008	R1	CYTMA445A-48LQI36ZZT	121	0	168	30	0
LQ16ABBALC	UT	MR151013	R1	CG8356AAT	121	0	168	30	0
LQ16ABARC	G	MR151019	R1	CG8164AAT	121	0	168	30	0

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

134

records

8781

0

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

LW56DGAZGL	L	MR141018	R1	CP7598AT	121	0	168	30	0
LW56DGAZGL	L	MR142009	R1	CP7598AT	121	0	96	29	0
LW56DGAZGL	L	MR142009	R1	CP7598AT	121	0	168	29	0
LW56DGAZGL	L	MR143035	R1	CP7598ATT	121	0	96	30	0
LW56DGAZGL	L	MR143035	R1	CP7598ATT	121	0	168	30	0
LW56DGAZGL	L	MR144008	R1	CP7598ATT	121	0	96	29	0



LW56DGAZGL	L	MR144008	R1	CP7598ATT	121	0	168	28	0
LW56DGAZGL	L	MR151034	R1	CP7598ATT	121	0	96	30	0
LW56DGAZGL	L	MR151034	R1	CP7598ATT	121	0	168	30	0

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

Sum

9 records

265 0

DFN, 0.8mm Thickness (Saw Type)

LH08AFAALL	UT	142503	R1	FM25V02-DG	121	0	168	77	0
LH08AFAALL	UT	142503	R1	FM25V02-DG	121	0	288	77	0
Sum			2					154	0

QSOP (Pb-Free)

SQ2414ACGN	JT	MR134055	R1	CY7C63743C-QXC	121	0	168	30	0
SQ2414ACGN	JT	MR141044	R1	CY7C63823-QXC	121	0	168	30	0

Summary for Package Family: QSOP (Pb-Free)

2 records

Sum

60 0

SNC (Pb-Free)

SY2831AIHN	JT	MR143002	R1	CG7427AA	121	0	96	30	0
SY2831AIHN	JT	MR143002	R1	CG7427AA	121	0	168	30	0

Summary for Package Family: SNC (Pb-Free)

2 records

Sum

60 0

SOIC (Pb Free)

SZ820AAAGL	UT	140502	R4	FM25V20A-G	121	0	168	77	0
SZ820AAAGL	UT	140502	R4	FM25V20A-G	121	0	288	77	0



SZ820AAAGL	UT	140502	R5	FM25V20A-G	121	0	168	77	0
SZ820AAAGL	UT	140502	R5	FM25V20A-G	121	0	288	77	0
SZ820AAAGL	UT	140502	R6	FM25V20A-G	121	0	168	77	0
SZ820AAAGL	UT	140502	R6	FM25V20A-G	121	0	288	77	0
SW815JRALL	UT	141405	R1	FM25V02-G	121	0	168	80	0
SW815JRALL	UT	141405	R1	FM25V02-G	121	0	288	80	0
SZ815PAAAN	RA	141603	R1	FM25V02A-GES	121	0	168	79	0
SZ815PAAAN	RA	141603	R1	FM25V02A-GES	121	0	288	78	0
SW815JRALL	UT	141703	R1	FM24CL64B-GA	121	0	96	80	0
SW815JRALL	UT	141703	R1	FM24CL64B-GA	121	0	104	80	0
SW815JRALL	UT	141703	R1	FM24CL64B-GA	121	0	168	70	0
SW815JRALL	UT	141703	R2	FM24CL64B-GA	121	0	96	80	0
SW815JRALL	UT	141703	R2	FM24CL64B-GA	121	0	104	80	0
SW815JRALL	UT	141703	R2	FM24CL64B-GA	121	0	168	70	0
SZ815QRALL	UT	141703	R3	FM25V01-G	121	0	96	80	0
SZ815QRALL	UT	141703	R3	FM25V01-G	121	0	104	80	0
SZ815QRALL	UT	141703	R3	FM25V01-G	121	0	168	70	0
SZ1615MAAL	RA	142306	R1	CY8C4014SXS-421	121	0	96	78	0
SZ1615MAAL	RA	142306	R1	CY8C4014SXS-421	121	0	168	78	0
SZ1615MAAL	RA	142306	R2	CY8C4014SXS-421	121	0	96	80	0
SZ1615MAAL	RA	142306	R3	CY8C4014SXS-421	121	0	96	80	0
SW815JRALL	UT	142502	R1	FM25V02-G	121	0	168	77	0
SW815JRALL	UT	142502	R1	FM25V02-G	121	0	288	77	0
SW815JRALL	UT	142502	R2	FM25V02-G	121	0	168	77	0
SW815JRALL	UT	142502	R2	FM25V02-G	121	0	288	77	0
SW815JRALL	UT	142502	R3	FM25V02-G	121	0	168	77	0



SW815JRALL	UT	142502	R3	FM25V02-G	121	0	288	77	0
SZ815PAAAN	RA	142801	R1	FM24V01-G	121	0	168	77	0
SZ815PAAAN	RA	142801	R1	FM24V01-G	121	0	288	77	0
SZ815PAAAN	RA	142801	R2	FM24V01-G	121	0	168	77	0
SZ815PAAAN	RA	142801	R2	FM24V01-G	121	0	288	77	0
SZ1615MAAL	RA	143003	R1	CY8C4014SXS-421	121	0	96	78	0
SZ1615MAAL	RA	143003	R1	CY8C4014SXS-421	121	0	168	78	0
SZ1615MAAL	RA	143003	R2	CY8C4014SXS-421	121	0	96	80	0
SZ1615MAAL	RA	143003	R3	CY8C4014SXS-421	121	0	96	80	0
SZ32458LNC	JT	143703	R1	CY62128EV30LL-45SXIKJ	121	0	168	82	0
SZ32458LNC	JT	143703	R1	CY62128EV30LL-45SXIKJ	121	0	288	72	0
SZ32458LNC	JT	143703	R2	CY62128EV30LL-45SXIKJ	121	0	168	77	0
SZ32458LNC	JT	143703	R2	CY62128EV30LL-45SXIKJ	121	0	288	77	0
SZ32451LLC	JT	143703	R3	CY62148ELL-55SXIKJ	121	0	168	82	0
SZ32451LLC	JT	143703	R3	CY62148ELL-55SXIKJ	121	0	288	72	0
SZ820AAAGL	UT	143801	R1	CY15B102Q-SXE	121	0	96	77	0
SZ28AAAAAR	T	144904	R1	STK11C88-SF45I	121	0	168	77	0
SZ28AAAAAR	T	144904	R1A	STK11C88-SF45I	121	0	168	77	0
SZ28AAAAAR	T	144904	R2A	STK11C88-SF45I	121	0	168	77	0
SZ28AAAAAR	T	144904	R3A	STK12C68-SF45	121	0	168	76	0
SZ1615CAGL	RA	150421	R1	CY8C20237-24SXI	121	0	168	80	0
SZ1615CAGL	RA	150421	R2	CY8C20237-24SXI	121	0	168	80	0
SZ1615CAGL	RA	150421	R3	CY8C20237-24SXI	121	0	168	80	0
SZ1615NGNC	RA	150801	R1	CYPD1132-16SXIES	121	0	168	79	0
SZ1615NGNC	RA	150801	R1	CYPD1132-16SXIES	121	0	288	79	0
SZ1615LDGN	RA	MR134043	R1	CY7C63803-SXCT	121	0	168	30	0



SZ815CGAAS	M	MR141016	R1	CY2305CSXA-1HT	121	0	168	30	0
SW815SRALL	LP	MR141025	R1	FM25C160B-GTR	121	0	168	30	0
SZ815JRALL	UT	MR141036	R1	FM25CL64B-GTR	121	0	168	30	0
SZ323AGASC	M	MR141040	R1	CY14E256LA-SZ45XIT	121	0	288	45	0
SZ323AGASC	M	MR141040	R2	CY14E256LA-SZ45XI	121	0	288	45	0
SZ24315GNC	RA	MR141041	R1	CY7C63823-SXCKA	121	0	288	45	0
SZ24315GNC	RA	MR141041	R2	CY7C60223-SXCKA	121	0	288	45	0
SZ24315GNC	RA	MR141041	R3	CY7C63743C-SXCKA	121	0	288	45	0
SZ815HRALL	LP	MR141043	R1	FM25V01-GTR	121	0	168	30	0
SZ28BNRALL	UT	MR141061	R1	FM28V020-SGTR	121	0	176	30	0
SZ1615FAL	T	MR141068	R1	CY8C20110-SX2I	121	0	168	30	0
SZ32451BLN	JT	MR141072	R1	CP7935ATT	121	0	168	30	0
SZ815HRALL	LP	MR142040	R1	FM25V01-GTR	121	0	168	30	0
SZ28BNRALL	UT	MR142046	R1	FM28V020-SGTR	121	0	176	30	0
SZ815JRALL	UT	MR142054	R1	FM25CL64B-GTR	121	0	168	30	0
SZ1615FAL	T	MR143018	R1	CY8C20110-SX2I	121	0	168	30	0
SZ1615FAL	T	MR143018	R1	CY8C20110-SX2I	121	0	288	30	0
SZ815HRALL	LP	MR143022	R1	FM25V01-GTR	121	0	168	30	0
SW815SRALL	LP	MR143029	R1	FM25C160B-GTR	121	0	168	30	0
SZ815JRALL	UT	MR143034	R1	FM25CL64B-GATR	121	0	168	30	0
SZ28BNRALL	UT	MR143039	R1	FM28V020-SGTR	121	0	176	30	0
SZ24315DGN	RA	MR143051	R1	CY7C63823-SXC	121	0	168	30	0
SZ815CGAAS	M	MR143057	R1	CY2305CSXA-1HT	121	0	96	30	0
SZ815CGAAS	M	MR143057	R1	CY2305CSXA-1HT	121	0	168	30	0
SZ815HRALL	LP	MR144027	R1	FM25V01-GTR	121	0	168	30	0
SW815SRALL	LP	MR144028	R1	CG8278AAT	121	0	168	30	0



SZ28BNRALL	UT	MR144033	R1	FM28V020-SGTR	121	0	176	30	0
SZ815JRALL	UT	MR144041	R1	FM25CL64B-GTR	121	0	168	30	0
SZ815CGAAS	M	MR144046	R1	CY2305CSXA-1HT	121	0	96	30	0
SZ815CGAAS	M	MR144046	R1	CY2305CSXA-1HT	121	0	168	30	0
SZ183CPANC	RA	MR151021	R1	CY7C63813-SXC	121	0	168	30	0

Summary for Package Family: SOIC (Pb Free)**85 records****5150 0****SOJ (Pb-Free)**

VZ32420LLC	JT	143704	R1	CY7C1019D-10VXIKJ	121	0	168	85	0
VZ32420LLC	JT	143704	R1	CY7C1019D-10VXIKJ	121	0	176	85	0
VZ444ACLNC	JT	143704	R2	CY7C1021DV33-10VXIKJ	121	0	288	83	0
VZ444ACLNC	JT	143704	R3	CY7C1021DV33-10VXIKJ	121	0	288	85	0
VZ32314CLL	JT	MR141074	R1	CY7C1018DV33-10VXIT	121	0	176	30	0
VZ32314CLL	JT	MR142011	R1	CY7C1018DV33-10VXIT	121	0	168	30	0
VZ32314CLL	JT	MR143045	R1	CY7C1018DV33-10VXIT	121	0	168	30	0

Summary for Package Family: SOJ (Pb-Free)**14 records****428 0****SSOP (Pb-Free)**

SP483ACANC	JT	143702	R1	CY8C20546A-24PVXIKJ	121	0	168	82	0
SP483ACANC	JT	143702	R1	CY8C20546A-24PVXIKJ	121	0	288	72	0
SP483ACANC	JT	143702	R2	CY8C20546A-24PVXIKJ	121	0	168	85	0
SP483ACANC	JT	143702	R2	CY8C20546A-24PVXIKJ	121	0	288	85	0
SP563DBGNC	JT	143702	R3	CY7C68013A-56PVXCKJ	121	0	168	82	0
SP563DBGNC	JT	143702	R3	CY7C68013A-56PVXCKJ	121	0	288	72	0
SP563DBCGN	JT	MR141063	R1	CY7C68013A-56PVXC	121	0	288	29	0
SP2024CAGL	M	MR142020	R1	CY8C21334-24PVXA	121	0	96	30	0



SP2024CAGL	M	MR142020	R1	CY8C21334-24PVXA	121	0	168	30	0
SP483MBGNC	RA	MR142052	R1	CY8C29666-24PVXI	121	0	168	77	0
SP483MBGNC	RA	MR142052	R1	CY8C29666-24PVXI	121	0	288	77	0
SP483MBGNC	RA	MR142052	R2	CY8C29666-24PVXI	121	0	168	77	0
SP483MBGNC	RA	MR142052	R2	CY8C29666-24PVXI	121	0	288	76	0
SP483MBGNC	RA	MR142052	R3	CY8C29666-24PVXI	121	0	168	76	0
SP483MBGNC	RA	MR142052	R3	CY8C29666-24PVXI	121	0	288	76	0
SP282ABGNC	RA	MR142061	R1	CY8C24533-24PVXI	121	0	168	30	0
SP282ABGNC	RA	MR142061	R1	CY8C24533-24PVXI	121	0	288	30	0
SP2023GALC	T	MR142064	R1	CG6865AST	121	0	168	30	0
SP2023GALC	T	MR142064	R1	CG6865AST	121	0	288	30	0
SP2822BGL	M	MR143003	R1	CY8C21534-12PVXE	121	0	96	30	0
SP2822BGL	M	MR143003	R1	CY8C21534-12PVXE	121	0	168	30	0
SP282ABGNC	RA	MR143015	R1	CY8C24533-24PVXI	121	0	168	30	0
SP282ABGNC	RA	MR143015	R1	CY8C24533-24PVXI	121	0	288	30	0
SP563DBCGN	JT	MR143055	R1	CG8082AM	121	0	168	30	0
SP282ABGNC	RA	MR144002	R1	CY8C24533-24PVXI	121	0	168	30	0
SP282ABGNC	RA	MR144002	R1	CY8C24533-24PVXI	121	0	288	30	0
SP2024CAGL	M	MR144036	R1	CY8C21334-24PVXAT	121	0	96	30	0
SP2024CAGL	M	MR144036	R1	CY8C21334-24PVXAT	121	0	168	30	0
SP563DBCGN	JT	MR144055	R1	CY7C68013A-56PVXCT	121	0	168	30	0
SP2024CAGL	M	MR151033	R1	CY8C21334-24PVXAT	121	0	96	29	0

Summary for Package Family: SSOP (Pb-Free)**30 records****1475 0****TQFP (Pb-Free)**

AZ44ASHLLC	R	134904	R1	CY8C4245AXI8-483	121	0	168	77	0
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AZ44ASHLLC	R	134904	R1	CY8C4245AXI8-483	121	0	288	77	0
AZ100SJAAL	R	141001	R1	CYONSFN3050A-100AZA	121	0	96	85	0
AZ100SJAAL	R	141001	R1	CYONSFN3050A-100AZA	121	0	168	85	0
AZ100SJAAL	R	141001	R2	CYONSFN3050A-100AZA	121	0	96	85	0
AZ100SJAAL	R	141001	R2	CYONSFN3050A-100AZA	121	0	168	85	0
AZ100SJAAL	R	141001	R3	CYONSFN3050A-100AZA	121	0	96	85	0
AZ100SJAAL	R	141001	R3	CYONSFN3050A-100AZA	121	0	168	85	0
AZ100RBLNC	JT	141302	R1	CY7C1370D-167AXCKJ	121	0	288	80	0
AZ100RRDLL	JT	141302	R2	7C1490XC-**JTAZC	121	0	500	73	0
AZ44ABAASC	G	141404	R1	CY8C4245AXI-483	121	0	168	80	0
AZ44ABAASC	G	141404	R1	CY8C4245AXI-483	121	0	288	80	0
AZ44ABAASC	G	141404	R2	CY8C4245AXI-483	121	0	168	80	0
AZ44ABAASC	G	141404	R2	CY8C4245AXI-483	121	0	288	80	0
AZ44ABAASC	G	141404	R3	CY8C4245AXI-483	121	0	168	80	0
AZ44ABAASC	G	141404	R3	CY8C4245AXI-483	121	0	288	80	0
AZ100SJAAL	R	142307	R1	CYTMA568-100AS54ZX	121	0	96	78	0
AZ100SJAAL	R	142307	R1	CYTMA568-100AS54ZX	121	0	168	78	0
AZ100SJAAL	R	142307	R2	CYTMA568-100AA54AI	121	0	96	78	0
AZ100SJAAL	R	142307	R2	CYTMA568-100AA54AI	121	0	168	78	0
AZ100SJAAL	R	142307	R3	CYTMA568-100AA54BB	121	0	96	78	0
AZ100SJAAL	R	142307	R3	CYTMA568-100AA54BB	121	0	168	78	0
AZ100SJAAL	R	143210	R1	CYTMA568-100AS54ZX	121	0	96	78	0
AZ100SJAAL	R	143210	R1	CYTMA568-100AS54ZX	121	0	168	78	0
AZ100SJAAL	R	143210	R2	CYTMA568-100AA54AI	121	0	96	78	0
AZ100SJAAL	R	143210	R2	CYTMA568-100AA54AI	121	0	168	78	0
AZ100SJAAL	R	143210	R3	CYTMA568-100AA54BB	121	0	96	78	0



AZ100SJAAL	R	143210	R3	CYTMA568-100AA54BB	121	0	168	78	0
AZ48AAAAAS	T	144403	R1	CY8C4245AZI-483ES	121	0	168	80	0
AZ48AAAAAS	T	144403	R1	CY8C4245AZI-483ES	121	0	288	80	0
AZ48BAAAAS	JT	144404	R1	CY8C4245AZI-483ES	121	0	168	77	0
AZ48BAAAAS	JT	144404	R1	CY8C4245AZI-483ES	121	0	288	76	0
AZ32MAAGSC	G	MR133040	R1	CY7B9950AXCKG	121	0	288	45	0
AZ32MAAGSC	G	MR133040	R2	CY7B9950AXCKG	121	0	288	45	0
AZ32MAAGSC	G	MR133040	R3	CY7B9950AXCKG	121	0	168	45	0
AZ32MAAGSC	G	MR133040	R3	CY7B9950AXCKG	121	0	288	45	0
AZ32LXGAN	L	MR134059	R1	CY29948AXIT	121	0	168	30	0
AZ100RPAGN	R	MR141069	R1	CY7C1354C-166AXC	121	0	168	30	0
AZ100SGLLC	R	MR141071	R1	CY8C3246AXI-131T	121	0	168	45	0
AZ100SGLLC	R	MR141071	R1	CY8C3246AXI-131T	121	0	288	45	0
AZ100SGLLC	R	MR141071	R2	CY8C3246AXI-131	121	0	168	45	0
AZ100SGLLC	R	MR141071	R2	CY8C3246AXI-131	121	0	288	45	0
AZ100SGLLC	R	MR141071	R3	CY8C3244AXI-153	121	0	168	45	0
AZ100SGLLC	R	MR141071	R3	CY8C3244AXI-153	121	0	288	45	0
AZ32LXGAN	L	MR141076	R1	CY29946AXIT	121	0	168	30	0
AZ100RUCLN	JT	MR142019	R2	CY7C1350G-200AXC	121	0	168	30	0
AZ100RBCLN	JT	MR143041	R1	CY7C1370D-167AXI	121	0	168	30	0
AZ100RUCLN	JT	MR143044	R1	CY7C1350G-200AXC	121	0	168	30	0
AZ100RYLNC	JT	MR144014	R1	CY7C1360C-166AXI	121	0	168	44	0
AZ100RYLNC	JT	MR144014	R1	CY7C1360C-166AXI	121	0	288	44	0
AZ100RYLNC	JT	MR144014	R2	CY7C1360C-166AXI	121	0	168	45	0
AZ100RYLNC	JT	MR144014	R2	CY7C1360C-166AXI	121	0	288	45	0
AZ100RYLNC	JT	MR144014	R3	CY7C1360C-166AXI	121	0	168	45	0



AZ100RYLNC	JT	MR144014	R3	CY7C1360C-166AXI	121	0	288	45	0
AZ100RUCLN	JT	MR144059	R1	CY7C1350G-200AXCT	121	0	168	30	0

Summary for Package Family: TQFP (Pb-Free) **55** **records**

Sum **3474** **0**

TSOP (Pb-free)

ZT48AIALLC	G	MR134069	R1	CY62157EV30LL-45ZXI	121	0	168	28	0
ZT28R2ABGN	JT	MR141021	R1	CY62256NLL-55ZXAT	121	0	168	30	0
ZT32RAEDLN	RA	MR141032	R1	CG7517AAT	121	0	168	30	0
ZT32RBBALL	T	MR141048	R1	CY62128ELL-45ZXAT	121	0	168	30	0
ZT32RABALL	T	MR142026	R1	CY62128ELL-45ZXIT	121	0	168	30	0
ZT32RAEDLN	RA	MR142039	R1	CG7517AAT	121	0	168	30	0
ZT28R2BCLN	JT	MR142062	R1	CY62256NLL-55ZXI	121	0	168	30	0
ZT28R2ABGN	JT	MR143001	R1	CY62256NLL-55ZXAT	121	0	96	30	0
ZT28R2ABGN	JT	MR143001	R1	CY62256NLL-55ZXAT	121	0	168	29	0
ZT32RBBALL	T	MR143053	R1	CY62128ELL-45ZXAT	121	0	96	30	0
ZT32RBBALL	T	MR143053	R1	CY62128ELL-45ZXAT	121	0	168	29	0
ZT48AIALLC	G	MR144001	R2	CY62167EV30LL-45ZXIT	121	0	168	45	0
ZT32RAEDLN	RA	MR144050	R1	CY62128EV30LL-45ZXIT	121	0	168	30	0
ZT28R2BCLN	JT	MR144051	R1	CY62256NLL-55ZXI	121	0	168	30	0
ZT32RABALL	T	MR144058	R1	CY62128ELL-45ZXI	121	0	168	26	0

Summary for Package Family: TSOP (Pb-Free) 15 records

Sum 457 0

**TSOP I (Pb-Free)**

ZB32WRAAGL	G	MR141054	R1	FM28V100-TGTR	121	0	168	30	0
ZB32RHCALN	JT	MR141082	R1	CY62128EV30LL-45ZAXI	121	0	168	29	0
ZB32RHABLN	JT	MR142022	R1	CY62138FV30LL-45ZAXAT	121	0	96	30	0
ZB32RHABLN	JT	MR142022	R1	CY62138FV30LL-45ZAXAT	121	0	168	30	0
ZB32FRAAGL	G	MR142047	R1	FM28V100-TGTR	121	0	168	30	0
ZB32RHABLN	JT	MR144025	R1	CY62138FV30LL-45ZAXAT	121	0	96	30	0
ZB32RHABLN	JT	MR144025	R1	CY62138FV30LL-45ZAXAT	121	0	168	29	0

Summary for Package Family: TSOP I (Pb-Free)**7 records****208 0****Sum****TSOP II (Pb-Free)**

ZW544AFLRC	G	114501	R3	CY14B116N-ZSP45XIES	121	0	288	80	0
ZW544AFLRC	G	114501	R3A	CY14E116N-ZSP45XIES	121	0	168	79	0
ZW544AFLRC	G	123003	R1	CY14B116N-ZSP45XIES	121	0	288	80	0
ZW544AFLRC	G	123003	R2	CY14E116N-ZSP45XIES	121	0	168	79	0
ZW54BGALL	G	135101	R1	CY7C1061DV33-10ZSXI	121	0	288	77	0
ZW54BGALL	G	135101	R2	CY7C1061DV33-10ZSXI	121	0	288	77	0
ZW54BGALL	G	135101	R3	CY7C1061DV33-10ZSXI	121	0	288	75	0
ZW54BGALL	G	135101	R4	CY7C1061DV33-10ZSXI	121	0	288	76	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	121	0	168	80	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	121	0	288	80	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	121	0	168	80	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	121	0	288	80	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	121	0	168	80	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	121	0	288	80	0



ZW444WBLNC	JT	141303	R1	CY7C1049DV33-10ZSXIJK	121	0	288	78	0
ZW444AMLNC	JT	141303	R2	CY62146ESL-45ZSXIKJ	121	0	288	77	0
ZW444AMLNC	JT	141303	R2	CY62146ESL-45ZSXIKJ	121	0	500	71	0
ZW444AMLNC	JT	141303	R3	CY62147EV30LL-45ZSIKJ	121	0	288	80	0
ZW44BRXAGL	G	142501	R1	FM22L16-55-TG	121	0	168	80	0
ZW44BRXAGL	G	142501	R1	FM22L16-55-TG	121	0	288	80	0
ZW44AOLN	JT	MR141017	R1	CY62146EV30LL-45ZSXAX	121	0	168	30	0
ZW44BRXAGL	G	MR141035	R1	FM22L16-55-TG	121	0	168	30	0
ZW324CBLL	T	MR141073	R1	CY62148EV30LL-45ZSXII	121	0	168	30	0
ZW444AOLN	JT	MR142008	R1	CY62146EV30LL-45ZSXAT	121	0	96	30	0
ZW444AOLN	JT	MR142008	R1	CY62146EV30LL-45ZSXAT	121	0	168	30	0
ZW324FBGL	T	MR142045	R1	CY7C1019CV33-10ZXA	121	0	96	30	0
ZW324FBGL	T	MR142045	R1	CY7C1019CV33-10ZXA	121	0	168	30	0
ZW444ALLR	G	MR142053	R1	CY7C1051DV33-12ZSXII	121	0	168	30	0
ZW44BRXAGL	G	MR142058	R1	FM22L16-55-TG	121	0	168	30	0
ZW44AXYAGL	RA	MR143005	R1	CY7C1041DV33-10ZSXII	121	0	168	30	0
ZW444AOLN	JT	MR143036	R2	CY62146EV30LL-45ZSXAX	121	0	96	30	0
ZW444AOLN	JT	MR143036	R2	CY62146EV30LL-45ZSXAX	121	0	168	30	0
ZW44AYAGLC	RA	MR144010	R1	CY7C1041DV33-10ZSXII	121	0	168	30	0
ZW444WBLNC	JT	MR144013	R1	CY7C1041DV33-10ZSXIT	121	0	168	45	0
ZW444WBLNC	JT	MR144013	R1	CY7C1041DV33-10ZSXIT	121	0	288	41	0
ZW444WBLNC	JT	MR144013	R2	CY7C1041DV33-10ZSXIT	121	0	168	45	0
ZW444WBLNC	JT	MR144013	R2	CY7C1041DV33-10ZSXIT	121	0	288	45	0
ZW444WBLNC	JT	MR144013	R3	CY7C1041DV33-10ZSXIT	121	0	168	45	0
ZW444AOLN	JT	MR144023	R1	CY62146EV30LL-45ZSXAX	121	0	96	29	0
ZW44BRXAGL	G	MR144026	R1	FM22L16-55-TG	121	0	168	30	0



ZW324GALL	T	MR144052	R1	CY7C1019DV33-10ZSXIT	121	0	168	30	0
ZW444ALLR	G	MR144056	R1	CY7C1059DV33-10ZSXI	121	0	168	30	0

Summary for Package Family: TSOP II (Pb-Free)**42 records****Sum** **2299** **0****TSSOP (Pb-Free)**

ZZ0812BGL	T	MR141022	R1	CY2304NZZXI-1T	121	0	168	30	0
ZZ1620GBAN	RA	MR141060	R1	CY22393FXCT	121	0	168	30	0
ZZ2014BGN	T	MR142027	R1	CG7734AAT	121	0	168	30	0
ZZ1620GANC	RA	MR142043	R1	CY22394FXCT	121	0	168	30	0
ZZ1620GBAN	RA	MR143024	R1	CY22393FXCT	121	0	168	30	0
ZZ0812BGL	T	MR143038	R1	CY2304NZZXI-1T	121	0	168	30	0
ZZ2014BGN	T	MR144007	R1	CG7732AAT	121	0	168	30	0
ZZ1620GBAN	RA	MR144021	R1	CY22393FXCT	121	0	168	30	0
ZZ1620GBAN	RA	MR151020	R1	CY22393FXCT	121	0	168	30	0

Summary for Package Family: TSSOP (Pb-Free)**9 records****Sum** **270** **0****PLCC (Pb-Free)**

JZ32RBGAN	M	MR141011	R1	CY7B991V-5JXI	121	0	288	11	0
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Summary for Package Family: PLCC (Pb-Free)**1 records****Sum** **11** **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)											
BK48DJALL	G	135002	R5	CY62177DV30LL-55BAXI	150/-65	0	500	80	0		
BK48DJALL	G	135002	R5	CY62177DV30LL-55BAXI	150/-65	0	1000	80	0		
BK48DJALL	G	135002	R6	CY62177DV30LL-55BAXI	150/-65	0	500	80	0		
BK48DJALL	G	135002	R6	CY62177DV30LL-55BAXI	150/-65	0	1000	80	0		
BK48DJALL	G	135002	R7	CY62177DV30LL-55BAXI	150/-65	0	500	80	0		
BK48DJALL	G	135002	R7	CY62177DV30LL-55BAXI	150/-65	0	1000	79	0		
BK48DJALL	G	135002	R8	CY62177DV30LL-55BAXI	150/-65	0	500	77	0		
BK48PAALL	RA	143005	R1	CY14B104NA-BA45XI	150/-65	0	500	80	0		
BK48PAALL	RA	143005	R2	CY14B104NA-BA45XI	150/-65	0	500	80	0		
BK48PAALL	RA	143005	R3	CY14B104NA-BA45XI	150/-65	0	500	80	0		
BK48PAALL	RA	143807	R1	CY14B104NA-BA45XI	150/-65	0	500	80	0		
BK48PAALL	RA	143807	R2	CY14B104NA-BA45XI	150/-65	0	500	80	0		
BK48PAALL	RA	143807	R3	CY14B104NA-BA45XI	150/-65	0	500	80	0		
BK121DAGLC	G	MR141004	R1	CYUSB3031-BZXC	150/-65	0	1000	26	0		
BK121DAGLC	G	MR141004	R2	CYUSB3014-BZXI	150/-65	0	1000	30	0		
BK121DGAGL	G	MR141004	R3	CYUSB3014-BZXI	150/-65	0	1000	30	0		
BK121DAGLC	G	MR141004	R4	CYUSB3014-BZXC	150/-65	0	1000	30	0		
BK48PAALLC	RA	MR141027	R1	CY14V101LA-BA25XIT	150/-65	0	500	30	0		
BK48MACALL	G	MR141047	R1	CY7C1041CV33-10BAJXET	150/-65	0	500	30	0		
BK48DLALL	G	MR141078	R1	CY62177EV30LL-55BAXI	150/-65	0	500	30	0		
BK48DLALL	G	MR142012	R1	CY62177EV30LL-55BAXI	150/-65	0	500	30	0		
BK121BGAGL	RA	MR142028	R1	CYUSB3014-BZXC	150/-65	0	500	30	0		



BK121DGAGL	G	MR142060	R1	CG7648AMT	150/-65	0	500	30	0
BK48PAALL	RA	MR143012	R1	CY14V101LA-BA45XIT	150/-65	0	500	30	0
BK48NZAGLC	G	MR143049	R1	CY14B101LA-BA45XI	150/-65	0	500	30	0
BK48NZAGLC	G	MR144005	R1	CY14B101LA-BA45XI	150/-65	0	500	30	0
BK121BGAGL	RA	MR144006	R1	CG7983AMT	150/-65	0	500	27	0
BK121DGAGL	G	MR144022	R1	CYUSB3035-BZXI	150/-65	0	500	30	0
Summary for Package Family: FBGA (0.75-0.8, 0.3mm, Pb-free)				56	records				
Sum								443	0

FBGA (1.0-1.27)

BB165BCLLE	G	MR134054	R1	CY7C1354D-200BZC	150/-65	0	500	30	0
BB165XALEC	G	MR142048	R1	CY7C1315KV18-250BZC	150/-65	0	500	30	0
BB165AVLE	RA	MR142059	R1	CY7C1305TV25-167BZC	150/-65	0	500	30	0
BB165AVLE	RA	MR144019	R1	CY7C1305TV25-167BZC	150/-65	0	1000	29	0

Summary for Package Family: FBGA (1.0-1.27)

4 records

119 0

Sum

FBGA (1.0-1.27, Pb-free)

BW165BCALL	G	141002	R1	CY7C1361C-100BZXE	150/-65	0	500	85	0
BW165BCALL	G	141002	R1	CY7C1361C-100BZXE	150/-65	0	1000	80	0
BW165BCALL	G	141002	R2	CY7C1361C-100BZXE	150/-65	0	500	80	0
BW165BCALL	G	141002	R2	CY7C1361C-100BZXE	150/-65	0	1000	80	0
BW165BCALL	G	141002	R3	CY7C13451G-100BZXE	150/-65	0	500	79	0
BW165BCALL	G	141002	R3	CY7C13451G-100BZXE	150/-65	0	1000	79	0
BW165BCALL	G	141204	R1	CY7C1361C-100BZXE	150/-65	0	500	85	0
BW165BCALL	G	141204	R1	CY7C1361C-100BZXE	150/-65	0	1000	80	0
BW165BCALL	G	141204	R2	CY7C1361C-100BZXE	150/-65	0	500	80	0



BW165BCALL	G	141204	R2	CY7C1361C-100BZXE	150/-65	0	1000	80	0
BW165BCALL	G	141204	R3	CY7C13451G-100BZXE	150/-65	0	500	79	0
BW165BCALL	G	141204	R3	CY7C13451G-100BZXE	150/-65	0	1000	79	0
BW165RLLLD	RA	143806	R1	CY7C1250KV18-400BZXC	150/-65	0	500	25	0
BW165RLLLD	RA	143806	R1	CY7C1250KV18-400BZXC	150/-65	0	1000	25	0
BW165RLLLD	RA	143806	R2	CY7C1250KV18-400BZXC	150/-65	0	500	75	0
BW165RLLLD	RA	143806	R2	CY7C1250KV18-400BZXC	150/-65	0	1000	75	0
BW165CELLC	G	MR142007	R1	CY7C1418KV18-300BZXC	150/-65	0	500	30	0
BW165CWLLC	G	MR143004	R1	CY7C1313KV18-250BZXI	150/-65	0	500	30	0
BW165CALLC	G	MR144004	R1	CY7C1318KV18-250BZXC	150/-65	0	500	30	0
BW165CELLC	G	MR151012	R1	CY7C1414LV18-250BZXC	150/-65	0	500	30	0

Summary for Package Family: FBGA

(1.0-1.27, Pb-free)
Sum

60 records

1286 0

FGBGA

FR361BALL	G	140604	R1	CY7C4121KV13-600FCXC	150/-65	0	500	77	0
FR361BALL	G	140604	R1	CY7C4121KV13-600FCXC	150/-65	0	1000	77	0
FR361BALL	G	140604	R2	CY7C4122KV13-933FCXC	150/-65	0	500	80	0
FR361BALL	G	140604	R2	CY7C4122KV13-933FCXC	150/-65	0	1000	80	0
FR361BALL	G	140604	R3	CY7C4141KV13-600FCXC	150/-65	0	500	79	0

Summary for Package Family: FCBGA

Sum

14 records

393 0


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

BZ48ARKLLC	RA	124902	R5D(Rev*A)	CY7C1061G30-10BV1XIES	150/-65	0	500	80	0
BZ48ARKLLC	RA	124902	R5D(Rev*A)	CY7C1061G30-10BV1XIES	150/-65	0	1000	80	0
BZ48ARFLLC	G	124902	R6(Rev*A)	CY7C1061G30-10BVXIES	150/-65	0	500	79	0
BZ100FALLC	G	150701	R1	CYUSB3304-BVXCES	150/-65	0	500	79	0
BZ100FALLC	G	150701	R1	CYUSB3304-BVXCES	150/-65	0	1000	79	0
BZ100FALLC	G	150701	R2	CYUSB3328-BVXCES	150/-65	0	500	80	0
BZ100FALLC	G	150701	R2	CYUSB3328-BVXCES	150/-65	0	1000	80	0
BZ100FALLC	G	150701	R3	CYUSB3314-BVXCES	150/-65	0	500	77	0
BZ100FALLC	G	150701	R3	CYUSB3314-BVXCES	150/-65	0	1000	76	0
BZ48ZEALEC	RA	MR141033	R1	CY62157EV18LL-55BVXIT	150/-65	0	500	30	0
BZ48CEAALL	G	MR142021	R1	CY62147EV30LL-45BVXA	150/-65	0	500	30	0
BZ48ZEALEC	RA	MR142044	R1	CY62157EV30LL-45BVXIT	150/-65	0	500	30	0
BZ48ZEALEC	RA	MR144060	R1	CY62157EV18LL-55BVXIT	150/-65	0	500	30	0
Summary for Package Family: VFBGA (0.75-0.8, 0.3mm, Pb-Free)				55	records				
Sum							830	0	

UFBGA (Pb-free)

BU48AAAALC	G	142004	R1	CYTMA525-48BUI25ZZEST	150/-65	0	500	80	0
BU48AAAALC	G	142004	R1	CYTMA525-48BUI25ZZEST	150/-65	0	1000	80	0
BU48AAAALC	G	142004	R2	CYTMA525-48BUI25ZZEST	150/-65	0	500	79	0
BU48AAAALC	G	142004	R2	CYTMA525-48BUI25ZZEST	150/-65	0	1000	79	0
BU48AAAALC	G	142004	R3	CYTMA525-48BUI25ZZEST	150/-65	0	500	78	0
BU48AAAALC	G	142004	R3	CYTMA525-48BUI25ZZEST	150/-65	0	1000	78	0



BU60AAAAAL	G	MR141053	R1	CY8CTMA463-60BUIT	150/-65	0	500	30	0
BU60AAAAAL	G	MR142002	R1	CY8CTMA463-60BUIT	150/-65	0	500	30	0

Summary for Package Family: UFBGA (Pb-free)**8 records****Sum** **534** **0****FLIPCHIP CSP (Pb-Free)**

FN68AADRCD	DT	143002	R1	CY8C4247FNI-BL483	125/-55	0	500	83	0
FN68AADRCD	DT	143002	R1	CY8C4247FNI-BL483	125/-55	0	1000	83	0
FN68AADRCD	DT	143002	R2	CYBL10563-68FNXI	125/-55	0	500	82	0
FN68AADRCD	DT	143002	R2	CYBL10563-68FNXI	125/-55	0	1000	82	0
FN68AADRCD	DT	143002	R3	CY8C4247FNI-BL483	125/-55	0	500	84	0
FN68AADRCD	DT	143002	R3	CY8C4247FNI-BL483	125/-55	0	1000	83	0
FN68AADRCD	DT	143002	R7	CYBL10563-68FNXIT	125/-55	0	500	1	0
FN35ADRCD	DT	144402	R1	CYPD1103-35FNXIES	125/-55	0	500	100	0
FN35ADRCD	DT	144402	R1	CYPD1103-35FNXIES	125/-55	0	1000	100	0
FN35ADRCD	DT	144402	R2	CYPD1103-35FNXIES	125/-55	0	500	100	0
FN35ADRCD	DT	144402	R2	CYPD1103-35FNXIES	125/-55	0	1000	100	0
FN35ADRCD	DT	144402	R3	CYPD1103-35FNXIES	125/-55	0	500	100	0
FN35ADRCD	DT	144402	R3	CYPD1103-35FNXIES	125/-55	0	1000	100	0

Summary for Package Family: FLIPCHIP CSP (Pb-Free)**13 records****Sum** **1098** **0****PDIP (Pb-Free)**

PZ083AAALL	UT	MR141039	R1	FM25V20-PG	150/-65	0	500	30	0
PZ286VFARC	M	MR142030	R1	CY62256NLL-70PXC	150/-65	0	500	30	0
PZ083AAALL	UT	MR142036	R1	FM25V20-PG	150/-65	0	500	30	0
PZ083AAALL	UT	MR143027	R1	FM25V20-PG	150/-65	0	500	30	0



PZ183DPGNC	RA	MR143032	R1	CS6632AF	150/-65	0	500	30	0
PZ083AAALL	UT	MR144039	R1	FM25V20-PG	150/-65	0	500	30	0
PZ183DPGNC	RA	MR151051	R1	CY7C63813-PXC	150/-65	0	500	30	0

Summary for Package Family: PDIP (Pb-Free)**7 records****Sum****210 0****QFN (COL, 0.6mm, Saw Type, Pb-free)**

LG16AEPALC	RA	MR141042	R2	CY8C20075-24LKXIT	150/-65	0	1000	45	0
LG16ARAARC	G	MR141034	R1	CY8C20075-24LKXIT	150/-65	0	500	45	0
LG16ARAARC	G	MR141034	R1	CY8C20075-24LKXIT	150/-65	0	1000	44	0
LG16ARAARC	G	MR141034	R2	CY8C20075-24LKXIT	150/-65	0	500	45	0
LG16ARAARC	G	MR141034	R2	CY8C20075-24LKXIT	150/-65	0	1000	45	0
LG16ARAARC	G	MR141034	R3	CY8C20075-24LKXIT	150/-65	0	500	45	0
LG16ARAARC	G	MR141034	R3	CY8C20075-24LKXIT	150/-65	0	1000	45	0
LG16ARAARC	G	MR141034	R4	CY8C20075-24LKXIT	150/-65	0	500	45	0
LG16ARAARC	G	MR141034	R4	CY8C20075-24LKXIT	150/-65	0	1000	44	0
LG16ARAARC	G	MR141034	R5	CY8C20075-24LKXIT	150/-65	0	500	45	0
LG16ARAARC	G	MR141034	R5	CY8C20075-24LKXIT	150/-65	0	1000	45	0
LG16ARAARC	G	MR141034	R6	CY8C20075-24LKXIT	150/-65	0	500	45	0
LG16ARAARC	G	MR141034	R6	CY8C20075-24LKXIT	150/-65	0	1000	45	0
LG16ARAARC	G	MR141034	R7	CY8C20075-24LKXIT	150/-65	0	500	44	0
LG16ARAARC	G	MR141034	R7	CY8C20075-24LKXIT	150/-65	0	1000	44	0
LG16ARAARC	G	MR141034	R9	CY8C20075-24LKXIT	150/-65	0	500	45	0
LG16ARAARC	G	MR141034	R9	CY8C20075-24LKXIT	150/-65	0	1000	45	0
LG16ARAARC	G	MR141034	R10	CY8C20075-24LKXIT	150/-65	0	500	44	0
LG16ARAARC	G	MR141034	R10	CY8C20075-24LKXIT	150/-65	0	1000	44	0
LG16AEPALC	RA	MR141042	R1	CY8C20075-24LKXIT	150/-65	0	1000	45	0



LG16AEPALC	RA	MR141042	R2	CY8C20075-24LKXIT	150/-65	0	1000	45	0
LG16ARAARC	G	MR142004	R1	CY8C20075-24LKXIT	150/-65	0	500	30	0
LG16AQAAAL	G	MR143011	R1	CY8C20247-24LKXI	150/-65	0	500	30	0
LG16AQAAAL	G	MR144009	R1	CG7745AAT	150/-65	0	500	29	0
LG16AQAAAL	G	MR151018	R1	CG7602AAT	150/-65	0	500	30	0
Summary for Package Family: QFN (COL, 0.6mm, Saw Type, Pb-free)		25	records					1058	0
Sum									

QFN (Saw Type, Pb-Free)

LQ48AEAAAL	RA	132504	R1	CY8CTMA443-48LQIES4	150/-65	0	500	80	0
LQ48AEAAAL	RA	132504	R1	CY8CTMA443-48LQIES4	150/-65	0	1000	80	0
LQ24AQBARC	G	134704	R3	CYRF9935-24LQXC	150/-65	0	500	80	0
LQ24AQBARC	G	134802	R3	CYRF9935-24LQXC	150/-65	0	500	80	0
LQ24AQBARC	G	134802	R3	CYRF9935-24LQXC	150/-65	0	1000	80	0
LT40BQAAAL	G	135103	R1	CYRF69103-40LTXC	150/-65	0	500	80	0
LT40BQAAAL	G	135103	R1	CYRF69103-40LTXC	150/-65	0	1000	80	0
LT40BQAAAL	G	135103	R2	CYRF69103-40LTXC	150/-65	0	500	79	0
LT40BQAAAL	G	135103	R2	CYRF69103-40LTXC	150/-65	0	1000	79	0
LT40BQAAAL	G	135103	R3	CYRF69103-40LTXC	150/-65	0	500	80	0
LT40BQAAAL	G	135103	R3	CYRF69103-40LTXC	150/-65	0	1000	80	0
LQ16AAAALC	RA	140404	R1	CY8CMBR31085CP-LQXIKA	150/-65	0	500	80	0
LQ48AGAACLC	RA	140504	R2	CYTMA445A-48TCES	150/-65	0	500	76	0
LQ48AGAACLC	RA	140504	R2	CYTMA445A-48TCES	150/-65	0	1000	76	0
LQ48AEAAAL	RA	140506	R1	CY8CTMA400-48LQIES2	150/-65	0	500	80	0
LQ48AEAAAL	RA	140506	R1	CY8CTMA400-48LQIES2	150/-65	0	1000	80	0
LQ16ABARC	G	140506	R2	CY8CMBR31085-LQXIKG	150/-65	0	500	80	0



LQ16ABARC	G	140506	R2	CY8CMBR31085-LQXIKG	150/-65	0	1000	80	0
LQ48AGAALC	RA	140902	R2	CYTMA445A-48TCES	150/-65	0	500	75	0
LQ48AGAALC	RA	140902	R2	CYTMA445A-48TCES	150/-65	0	1000	75	0
LQ48AGAALC	RA	140902	R3	CYTMA445A-48TCES	150/-65	0	500	77	0
LQ48AGAALC	RA	140902	R3	CYTMA445A-48TCES	150/-65	0	1000	77	0
LQ48AGAALC	RA	140902	R4	CYTMA445A-48TCES	150/-65	0	500	76	0
LQ48AGAALC	RA	140902	R4	CYTMA445A-48TCES	150/-65	0	1000	76	0
LQ44AGAALC	RA	140903	R1	CYTMA445A-44TCES	150/-65	0	500	75	0
LQ44AGAALC	RA	140903	R1	CYTMA445A-44TCES	150/-65	0	1000	73	0
LQ44AGAALC	RA	140903	R2	CYTMA445A-44TCES	150/-65	0	500	80	0
LQ44AGAALC	RA	140903	R2	CYTMA445A-44TCES	150/-65	0	1000	76	0
LQ44AGAALC	RA	140903	R3	CYTMA445A-44TCES	150/-65	0	500	76	0
LQ44AGAALC	RA	140903	R3	CYTMA445A-44TCES	150/-65	0	1000	71	0
LQ48AHAARC	G	140904	R1_Split 1	CYTMA445A-48TCES	150/-65	0	1000	77	0
LQ48AHAARC	G	140904	R1_Split 2	CYTMA445A-48TCES	150/-65	0	1000	2	0
LQ48AHAARC	G	140904	R1_Split 1	CYTMA445A-48TCES	150/-65	0	500	77	0
LQ48AHAARC	G	140904	R1_Split 2	CYTMA445A-48TCES	150/-65	0	500	2	0
LQ48AHAARC	G	140904	R2_Split 1	CYTMA445A-48TCES	150/-65	0	1000	73	0
LQ48AHAARC	G	140904	R2_Split 2	CYTMA445A-48TCES	150/-65	0	1000	2	0
LQ48AHAARC	G	140904	R2_Split 1	CYTMA445A-48TCES	150/-65	0	500	73	0
LQ48AHAARC	G	140904	R2_Split 2	CYTMA445A-48TCES	150/-65	0	500	2	0
LQ48AHAARC	G	140904	R3_Split 1	CYTMA445A-48TCES	150/-65	0	1000	77	0
LQ48AHAARC	G	140904	R3_Split 2	CYTMA445A-48TCES	150/-65	0	1000	2	0
LQ48AHAARC	G	140904	R3_Split 1	CYTMA445A-48TCES	150/-65	0	500	77	0
LQ48AHAARC	G	140904	R3_Split 2	CYTMA445A-48TCES	150/-65	0	500	2	0
LQ44AHAARC	G	140905	R1	CYTMA445A-44TCES	150/-65	0	500	80	0



LQ44AHAARC	G	140905	R1	CYTMA445A-44TCES	150/-65	0	1000	80	0
LQ44AHAARC	G	140905	R2	CYTMA445A-44TCES	150/-65	0	500	80	0
LQ44AHAARC	G	140905	R2	CYTMA445A-44TCES	150/-65	0	1000	80	0
LQ44AHAARC	G	140905	R3	CYTMA445A-44TCES	150/-65	0	500	80	0
LQ44AHAARC	G	140905	R3	CYTMA445A-44TCES	150/-65	0	1000	80	0
LQ48AEAAAL	RA	140908	R1	CY8CTMA443-48LQIES2	150/-65	0	500	80	0
LQ48AEAAAL	RA	140908	R1	CY8CTMA443-48LQIES2	150/-65	0	1000	80	0
LQ48ABAALC	RA	140908	R2	CYTMA545-48LQI36ZZA	150/-65	0	500	80	0
LQ48ABAALC	RA	140908	R2	CYTMA545-48LQI36ZZA	150/-65	0	1000	80	0
LT88BBARC	UT	141304	R1	CYUSB3326-88LTXC	150/-65	0	500	78	0
LT88BBARC	UT	141304	R1	CYUSB3326-88LTXC	150/-65	0	1000	78	0
LT88BBARC	UT	141304	R2	CYUSB3326-88LTXI	150/-65	0	500	80	0
LT88BBARC	UT	141304	R2	CYUSB3326-88LTXI	150/-65	0	1000	80	0
LT88BBARC	UT	141304	R3	CYUSB3328-88LTXC	150/-65	0	500	79	0
LT88BBARC	UT	141304	R3	CYUSB3328-88LTXC	150/-65	0	1000	79	0
LQ56BDAARC	RA	141306	R1A	CYTMA568-56LQI44ZX	150/-65	0	500	79	0
LQ56BDAARC	RA	141602	R1	CYTMA568-56LQI44ZXES	150/-65	0	500	80	0
LQ40AAAALC	RA	141702	R1	CY8C4245LQI-483	150/-65	0	500	80	0
LQ40AAAALC	RA	141702	R1	CY8C4245LQI-483	150/-65	0	1000	80	0
LQ40AAAALC	RA	141702	R2	CY8C4245LQI-483	150/-65	0	500	80	0
LQ40AAAALC	RA	141702	R2	CY8C4245LQI-483	150/-65	0	1000	80	0
LQ40AAAALC	RA	141702	R3	CY8C4245LQI-483	150/-65	0	500	79	0
LQ40AAAALC	RA	141702	R3	CY8C4245LQI-483	150/-65	0	1000	79	0
LQ16ABBALC	UT	141704	R4	CY8CMBR3145-LQXIES	150/-65	0	500	77	0
LQ16ABBALC	UT	141704	R4	CY8CMBR3145-LQXIES	150/-65	0	1000	66	0
LQ24ABBALC	UT	141704	R5	CY8CMBR3116-LQXIES	150/-65	0	500	77	0



LQ24ABBALC	UT	141704	R5	CY8CMBR3116-LQXIES	150/-65	0	1000	66	0
LQ56AAAALC	RA	141901	R2	CY8C4247LQI-BL483ES	150/-65	0	500	80	0
LQ48ABAALC	RA	141906	R1	CYTMA445-48LQI36ZZAES	150/-65	0	500	80	0
LQ48ABAALC	RA	141906	R1	CYTMA445-48LQI36ZZAES	150/-65	0	1000	80	0
LQ48ABAALC	RA	141906	R2	CYTMA445-48LQI36ZZAES	150/-65	0	500	80	0
LQ48ABAALC	RA	141906	R2	CYTMA445-48LQI36ZZAES	150/-65	0	1000	80	0
LQ16ABARC	G	142201	R1	CY8CMBR31085-LQXIKG	150/-65	0	500	80	0
LQ16ABARC	G	142201	R1	CY8CMBR31085-LQXIKG	150/-65	0	1000	80	0
LQ16ABARC	G	142201	R2	CY8CMBR31085-LQXIKG	150/-65	0	500	79	0
LQ16ABARC	G	142201	R2	CY8CMBR31085-LQXIKG	150/-65	0	1000	79	0
LQ16ABARC	G	142201	R3	CY8CMBR31085-LQXIKG	150/-65	0	500	80	0
LQ16ABARC	G	142201	R3	CY8CMBR31085-LQXIKG	150/-65	0	1000	80	0
LQ16AAAALC	RA	142303	R1	CY8CMBR3116-LQXI	150/-65	0	500	80	0
LQ16AAAALC	RA	142304	R1	CY8C4014LQI-422	150/-65	0	500	80	0
LQ56AAAALC	RA	143004	R1	CY8C4247LQI-BL483ES	150/-65	0	500	80	0
LQ56AAAALC	RA	143004	R2	CYBL10563-56LQXIES	150/-65	0	500	80	0
LQ56AAAALC	RA	143004	R3	CYBL10162-56LQXIES	150/-65	0	500	80	0
LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	150/-65	0	500	80	0
LQ24ABAALC	RA	143203	R2	CYRF9935-24LQXC	150/-65	0	1000	80	0
LQ24ABAALC	RA	143203	R3	CYRF9935-24LQXC	150/-65	0	500	80	0
LQ24ABAALC	RA	143203	R3	CYRF9935-24LQXC	150/-65	0	1000	80	0
LQ24ABAALC	RA	143203	R4	CYRF9935-24LQXC	150/-65	0	500	80	0
LQ24ABAALC	RA	143203	R4	CYRF9935-24LQXC	150/-65	0	1000	80	0
LQ24AABALC	RA	143205	R1	CY8C4014LQI-422	150/-65	0	500	85	0
LQ24AABALC	RA	143205	R1	CY8C4014LQI-422	150/-65	0	1000	80	0
LQ24AABALC	RA	143205	R2	CY8C4014LQI-422	150/-65	0	500	80	0



LQ24AABALC	RA	143205	R2	CY8C4014LQI-422	150/-65	0	1000	80	0
LQ24AABALC	RA	143205	R3	CY8C4014LQI-422	150/-65	0	500	85	0
LQ24ABAAL	RA	143205	R4	CY8C4014LQS-422	150/-65	0	500	85	0
LQ24ABAAL	RA	143205	R5	CY8C4014LQS-422	150/-65	0	500	79	0
LQ24ABAAL	RA	143205	R6	CY8C4014LQS-422	150/-65	0	500	80	0
LQ48AGAALC	RA	143803	R1	CYTMA445A5-48LQI36ZZ	150/-65	0	500	80	0
LQ48ABAALC	RA	144605	R1	CYTMA445-48LQI36AE	150/-65	0	500	40	0
LQ48ABAALC	RA	144605	R1	CYTMA445-48LQI36AE	150/-65	0	1000	40	0
LQ48ABAALC	RA	144605	R2	CYTMA445-48LQI36AE	150/-65	0	500	40	0
LQ48ABAALC	RA	144605	R2	CYTMA445-48LQI36AE	150/-65	0	1000	40	0
LQ48ABAALC	RA	144605	R3	CYTMA445-48LQI36AE	150/-65	0	500	40	0
LQ48ABAALC	RA	144605	R3	CYTMA445-48LQI36AE	150/-65	0	1000	40	0
LQ48AGAALC	RA	145007	R3	CYTMA445A-48TCES	150/-65	0	500	77	0
LQ48AGAALC	RA	145007	R3	CYTMA445A-48TCES	150/-65	0	1000	75	0
LQ48AGAALC	RA	145007	R4	CYTMA445A-48TCES	150/-65	0	500	77	0
LQ48AGAALC	RA	145007	R4	CYTMA445A-48TCES	150/-65	0	1000	77	0
LQ48AGAALC	RA	145007	R5	CYTMA445A-48TCES	150/-65	0	500	76	0
LQ48AGAALC	RA	145007	R5	CYTMA445A-48TCES	150/-65	0	1000	76	0
LT68BAAALC	RA	150404	R1	CYUSB3304-68LTXC	150/-65	0	500	76	0
LT68BAAALC	RA	150404	R1	CYUSB3304-68LTXC	150/-65	0	1000	76	0
LT68BAAALC	RA	150404	R2	CYUSB3304-68LTXC	150/-65	0	500	76	0
LT68BAAALC	RA	150404	R2	CYUSB3304-68LTXC	150/-65	0	1000	76	0
LT68BAAALC	RA	150404	R3	CYUSB3304-68LTXC	150/-65	0	500	76	0
LT68BAAALC	RA	150404	R3	CYUSB3304-68LTXC	150/-65	0	1000	76	0
LT32BAABGL	RA	MR134016	R1	CG7558AAT	150/-65	0	1000	21	0
LT40ABAALC	G	MR141020	R1	CG7380AM	150/-65	0	500*	30	0



LT68ADAAGL	RA	MR141046	R1	CY8C3246LTI-149T	150/-65	0	500	30	0
LQ48ABAALC	RA	MR142003	R1	CYTMA545-48LQI36AB	150/-65	0	500	30	0
LQ48ABAALC	RA	MR142003	R1	CYTMA545-48LQI36AB	150/-65	0	1000	30	0
LT56BEAGLC	RA	MR142049	R1	CS6651JAT	150/-65	0	500	30	0
LT68GAAARC	G	MR143037	R1	CY8C3245LTI-163	150/-65	0	500	30	0
LQ48ARAALC	G	MR143046	R1	CYTMA545-48LQI36ZZ	150/-65	0	500	30	0
LQ48ABAALC	RA	MR143050	R1	CP8109ATT	150/-65	0	500	30	0
LT56BPAAGL	RA	MR143056	R1	CS7275AAT	150/-65	0	500	30	0
LT56BPAAGL	RA	MR143056	R1	CS7275AAT	150/-65	0	1000	30	0
LQ48ABAALC	RA	MR144003	R1	CY8CTMA445-48LQIT	150/-65	0	500	30	0
LT56BEAGLC	RA	MR144035	R1	CY7C64215-56LTXCT	150/-65	0	500	30	0
LT56BEAGLC	RA	MR144035	R1	CY7C64215-56LTXCT	150/-65	0	1000	26	0
LQ40AAAALC	RA	MR151007	R1	CY8C4125LQI-483	150/-65	0	500	30	0
LQ48AGAACLC	RA	MR151008	R1	CYTMA445A-48LQI36ZZT	150/-65	0	500	30	0
LT32BAABGL	RA	MR151009	R1	CG7558AAT	150/-65	0	500	30	0
LQ16ABARC	G	MR151019	R1	CG8164AAT	150/-65	0	500	30	0

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

137 records

9173 0

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

LW56DGAZGL	L	MR142009	R1	CP7598AT	150/-65	0	500	30	0
LW56DGAZGL	L	MR143035	R1	CP7598ATT	150/-65	0	500	30	0
LW56DGAZGL	L	MR144008	R1	CP7598ATT	150/-65	0	500	30	0

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

QFN 3 records

90 0

**DFN, 0.8mm Thickness (Saw Type)**

LH08DBAALL	UT	140503	R1	FM25V20A-DGES	150/-65	0	1000	77	0
LH08DBAALL	UT	140503	R2	FM25V20A-DGES	150/-65	0	1000	77	0
LH08DBAALL	UT	140503	R3	FM25V20A-DGES	150/-65	0	1000	77	0
LH08AFAALL	UT	142503	R1	FM25V02-DG	150/-65	0	500	77	0
LH08AFAALL	UT	142503	R1	FM25V02-DG	150/-65	0	1000	77	0
LH08AFAALL	UT	142503	R2	FM25V02-DG	150/-65	0	500	77	0
LH08AFAALL	UT	142503	R2	FM25V02-DG	150/-65	0	1000	77	0
LH08AFAALL	UT	142503	R3	FM25V02-DG	150/-65	0	500	77	0
LH08AFAALL	UT	142503	R3	FM25V02-DG	150/-65	0	1000	77	0
Summary for Package Family: DFN (Pb-Free)				9	records				
Sum							693	0	

QSOP (Pb-Free)

SQ2414ACGN	JT	MR134055	R1	CY7C63743C-QXC	150/-65	0	500	30	0
SQ2414ACGN	JT	MR141044	R1	CY7C63823-QXC	150/-65	0	500	30	0

Summary for Package Family: QSOP (Pb-Free)**2 records****60 0****Sum****SNC (Pb-Free)**

SY2831AIHN	JT	MR143002	R1	CG7427AA	150/-65	0	500	29	0
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Summary for Package Family: SNC (Pb-Free)**1 record****29 0****Sum****SOIC (Pb Free)**

SZ820AAAGL	UT	140502	R1	FM25V20A-GES	150/-65	0	1000	72	0
SZ820AAAGL	UT	140502	R2	FM25V20A-GES	150/-65	0	1000	68	0



SZ820AAAGL	UT	140502	R3	FM25V20A-GES	150/-65	0	1000	61	0
SW815JRALL	UT	141405	R1	FM25V02-G	150/-65	0	500	80	0
SW815JRALL	UT	141405	R1	FM25V02-G	150/-65	0	1000	80	0
SZ815PAAAN	RA	141603	R1	FM25V02A-GES	150/-65	0	500	80	0
SZ815PAAAN	RA	141603	R1	FM25V02A-GES	150/-65	0	1000	80	0
SW815JRALL	UT	141703	R1	FM24CL64B-GA	150/-65	0	500	80	0
SW815JRALL	UT	141703	R1	FM24CL64B-GA	150/-65	0	1000	70	0
SW815JRALL	UT	141703	R2	FM24CL64B-GA	150/-65	0	500	79	0
SW815JRALL	UT	141703	R2	FM24CL64B-GA	150/-65	0	1000	69	0
SZ815QRALL	UT	141703	R3	FM25V01-G	150/-65	0	500	80	0
SZ815QRALL	UT	141703	R3	FM25V01-G	150/-65	0	1000	70	0
SZ1615MAAL	RA	142306	R1	CY8C4014SXS-421	150/-65	0	500	84	0
SZ1615MAAL	RA	142306	R1	CY8C4014SXS-421	150/-65	0	1000	79	0
SZ1615MAAL	RA	142306	R2	CY8C4014SXS-421	150/-65	0	500	80	0
SZ1615MAAL	RA	142306	R3	CY8C4014SXS-421	150/-65	0	500	80	0
SW815JRALL	UT	142502	R1	FM25V02-G	150/-65	0	500	77	0
SW815JRALL	UT	142502	R1	FM25V02-G	150/-65	0	1000	77	0
SW815JRALL	UT	142502	R2	FM25V02-G	150/-65	0	500	77	0
SW815JRALL	UT	142502	R2	FM25V02-G	150/-65	0	1000	77	0
SW815JRALL	UT	142502	R3	FM25V02-G	150/-65	0	500	77	0
SW815JRALL	UT	142502	R3	FM25V02-G	150/-65	0	1000	77	0
SZ815PAAAN	RA	142801	R1	FM24V01-G	150/-65	0	500	77	0
SZ815PAAAN	RA	142801	R1	FM24V01-G	150/-65	0	1000	77	0
SZ815PAAAN	RA	142801	R2	FM24V01-G	150/-65	0	500	76	0
SZ815PAAAN	RA	142801	R2	FM24V01-G	150/-65	0	1000	75	0
SZ815PAAAN	RA	142801	R3	FM24V01-G	150/-65	0	500	75	0



SZ815PAAAN	RA	142801	R3	FM24V01-G	150/-65	0	1000	75	0
SZ1615MAAL	RA	143003	R1	CY8C4014SXS-421	150/-65	0	500	84	0
SZ1615MAAL	RA	143003	R1	CY8C4014SXS-421	150/-65	0	1000	79	0
SZ1615MAAL	RA	143003	R2	CY8C4014SXS-421	150/-65	0	500	80	0
SZ1615MAAL	RA	143003	R3	CY8C4014SXS-421	150/-65	0	500	80	0
SZ32458LNC	JT	143703	R1	CY62128EV30LL-45SXIJK	150/-65	0	500	82	0
SZ32458LNC	JT	143703	R1	CY62128EV30LL-45SXIJK	150/-65	0	1000	72	0
SZ32458LNC	JT	143703	R2	CY62128EV30LL-45SXIJK	150/-65	0	500	77	0
SZ32458LNC	JT	143703	R2	CY62128EV30LL-45SXIJK	150/-65	0	1000	77	0
SZ32451LLC	JT	143703	R3	CY62148ELL-55SXIJK	150/-65	0	500	82	0
SZ32451LLC	JT	143703	R3	CY62148ELL-55SXIJK	150/-65	0	1000	72	0
SZ820AAAGL	UT	143801	R1	CY15B102Q-SXE	150/-65	0	500	77	0
SZ820AAAGL	UT	143801	R1	CY15B102Q-SXE	150/-65	0	1000	72	0
SZ28AAAAAR	T	144904	R1A	STK11C88-SF45I	150/-65	0	500	77	0
SZ28AAAAAR	T	144904	R2A	STK11C88-SF45I	150/-65	0	500	77	0
SZ28AAAAAR	T	144904	R3A	STK12C68-SF45	150/-65	0	500	77	0
SZ1615CAGL	RA	150421	R1	CY8C20237-24SXI	150/-65	0	500	78	0
SZ1615CAGL	RA	150421	R1A	CY8C20237-24SXI	150/-65	0	500	80	0
SZ1615CAGL	RA	150421	R2	CY8C20237-24SXI	150/-65	0	500	80	0
SZ1615CAGL	RA	150421	R2A	CY8C20237-24SXI	150/-65	0	500	80	0
SZ1615CAGL	RA	150421	R3	CY8C20237-24SXI	150/-65	0	500	79	0
SZ1615CAGL	RA	150421	R3A	CY8C20237-24SXI	150/-65	0	500	80	0
SZ1615NGNC	RA	150801	R1	CYPD1132-16SXIES	150/-65	0	500	78	0
SZ1615NGNC	RA	150801	R1	CYPD1132-16SXIES	150/-65	0	1000	78	0
SZ1615NGNC	RA	150801	R2	CYPD1132-16SXIES	150/-65	0	500	79	0
SZ1615NGNC	RA	150801	R2	CYPD1132-16SXIES	150/-65	0	1000	79	0



SZ1615NGNC	RA	150801	R3	CYPD1132-16SXIES	150/-65	0	500	80	0
SZ1615NGNC	RA	150801	R3	CYPD1132-16SXIES	150/-65	0	1000	80	0
SZ24315EGN	RA	MR133044	R1	CP6604BMT	150/-65	0	500	30	0
SZ24315EGN	RA	MR133044	R1	CP6604BMT	150/-65	0	1000	30	0
SZ1615LDGN	RA	MR134043	R1	CY7C63803-SXCT	150/-65	0	500	30	0
SZ32451BLN	JT	MR134053	R1	CY7C53120E4-40SXIT	150/-65	0	1000	30	0
SZ24315EGN	RA	MR141010	R1	CY7C63743C-SXC	150/-65	0	1000*	30	0
SZ24315EGN	RA	MR141010	R1	CY7C63743C-SXC	150/-65	0	500*	30	0
SZ815CGAAS	M	MR141016	R1	CY2305CSXA-1HT	150/-65	0	500	29	0
SW815SRALL	LP	MR141025	R1	FM25C160B-GTR	150/-65	0	500	30	0
SZ815JRALL	UT	MR141036	R1	FM25CL64B-GTR	150/-65	0	1000*	30	0
SZ815JRALL	UT	MR141036	R1	FM25CL64B-GTR	150/-65	0	500*	30	0
SZ323AGASC	M	MR141040	R1	CY14E256LA-SZ45XIT	150/-65	0	500	45	0
SZ323AGASC	M	MR141040	R1	CY14E256LA-SZ45XIT	150/-65	0	1000	45	0
SZ323AGASC	M	MR141040	R2	CY14E256LA-SZ45XI	150/-65	0	500	45	0
SZ323AGASC	M	MR141040	R2	CY14E256LA-SZ45XI	150/-65	0	1000	45	0
SZ24315GNC	RA	MR141041	R1	CY7C63823-SXCKA	150/-65	0	1000	45	0
SZ24315GNC	RA	MR141041	R2	CY7C60223-SXCKA	150/-65	0	1000	45	0
SZ24315GNC	RA	MR141041	R3	CY7C63743C-SXCKA	150/-65	0	1000	45	0
SZ815HRALL	LP	MR141043	R1	FM25V01-GTR	150/-65	0	500	30	0
SZ815HRALL	LP	MR141043	R1	FM25V01-GTR	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR141061	R1	FM28V020-SGTR	150/-65	0	500	30	0
SZ1615FAL	T	MR141068	R1	CY8C20110-SX2I	150/-65	0	500	30	0
SZ32451BLN	JT	MR141072	R1	CP7935ATT	150/-65	0	500	30	0
SZ815HRALL	LP	MR142040	R1	FM25V01-GTR	150/-65	0	500	29	0
SZ815HRALL	LP	MR142040	R1	FM25V01-GTR	150/-65	0	1000	29	0



SZ28BNRALL	UT	MR142046	R1	FM28V020-SGTR	150/-65	0	500	30	0
SZ815JRALL	UT	MR142054	R1	FM25CL64B-GTR	150/-65	0	500	30	0
SZ32451BLN	JT	MR143017	R1	CP7896ATT	150/-65	0	500	30	0
SZ1615FAL	T	MR143018	R1	CY8C20110-SX2I	150/-65	0	500	30	0
SZ815HRALL	LP	MR143022	R1	FM25V01-GTR	150/-65	0	500	30	0
SW815SRALL	LP	MR143029	R1	FM25C160B-GTR	150/-65	0	500	28	0
SZ28BNRALL	UT	MR143039	R1	FM28V020-SGTR	150/-65	0	500	30	0
SZ24315DGN	RA	MR143051	R1	CY7C63823-SXC	150/-65	0	500	30	0
SZ815CGAAS	M	MR143057	R1	CY2305CSXA-1HT	150/-65	0	500	29	0
SZ815CGAAS	M	MR143057	R1	CY2305CSXA-1HT	150/-65	0	1000	27	0
SZ815HRALL	LP	MR144027	R1	FM25V01-GTR	150/-65	0	500	30	0
SZ815HRALL	LP	MR144027	R1	FM25V01-GTR	150/-65	0	1000	30	0
SW815SRALL	LP	MR144028	R1	CG8278AAT	150/-65	0	500	30	0
SW815SRALL	LP	MR144028	R1	CG8278AAT	150/-65	0	1000	30	0
SZ28BNRALL	UT	MR144033	R1	FM28V020-SGTR	150/-65	0	500	30	0
SZ815JRALL	UT	MR144041	R1	FM25CL64B-GTR	150/-65	0	500	30	0
SZ815JRALL	UT	MR144041	R1	FM25CL64B-GTR	150/-65	0	1000	30	0
SZ815CGAAS	M	MR144046	R1	CY2305CSXA-1HT	150/-65	0	500	28	0
SZ815CGAAS	M	MR144046	R1	CY2305CSXA-1HT	150/-65	0	1000	28	0
SZ183CPANC	RA	MR151021	R1	CY7C63813-SXC	150/-65	0	500	30	0
SZ815HRALL	LP	MR151024	R1	FM25V01-GTR	150/-65	0	500	30	0
SZ815JRALL	UT	MR151030	R1	FM25CL64B-GTR	150/-65	0	500	30	0
SZ815JRALL	UT	MR151037	R1	FM25CL64B-GTR	150/-65	0	500	30	0
SW815JRALL	UT	MR151040	R1	FM25C160B-GATR	150/-65	0	500	30	0

Summary for Package Family: SOIC (Pb Free)

104

records

Sum

5857

0

**SOJ (Pb-Free)**

VZ32420LLC	JT	143704	R1	CY7C1019D-10VXIKJ	150/-65	0	500	82	0
VZ32420LLC	JT	143704	R1	CY7C1019D-10VXIKJ	150/-65	0	1000	72	0
VZ444ACLNC	JT	143704	R2	CY7C1021DV33-10VXIKJ	150/-65	0	500	82	0
VZ444ACLNC	JT	143704	R2	CY7C1021DV33-10VXIKJ	150/-65	0	1000	72	0
VZ444ACLNC	JT	143704	R3	CY7C1021DV33-10VXIKJ	150/-65	0	500	85	0
VZ444ACLNC	JT	143704	R3	CY7C1021DV33-10VXIKJ	150/-65	0	1000	82	0
VZ32314CLL	JT	MR141074	R1	CY7C1018DV33-10VXIT	150/-65	0	500	30	0
VZ32314CLL	JT	MR142011	R1	CY7C1018DV33-10VXIT	150/-65	0	500	30	0
VZ32314CLL	JT	MR143045	R1	CY7C1018DV33-10VXIT	150/-65	0	500	30	0
VZ32314CLL	JT	MR143045	R1	CY7C1018DV33-10VXIT	150/-65	0	1000	30	0

Summary for Package Family: SOJ (Pb-Free)**10 records****595 0****Sum****SSOP (Pb-Free)**

SP483ACANC	JT	143702	R1	CY8C20546A-24PVXIKJ	150/-65	0	500	82	0
SP483ACANC	JT	143702	R1	CY8C20546A-24PVXIKJ	150/-65	0	1000	72	0
SP483ACANC	JT	143702	R2	CY8C20546A-24PVXIKJ	150/-65	0	500	85	0
SP483ACANC	JT	143702	R2	CY8C20546A-24PVXIKJ	150/-65	0	1000	85	0
SP563DBGNC	JT	143702	R3	CY7C68013A-56PVXCKJ	150/-65	0	500	82	0
SP563DBGNC	JT	143702	R3	CY7C68013A-56PVXCKJ	150/-65	0	1000	72	0
SP2814GALC	T	MR133006	R2	CY8C27443-24PVXI	150/-65	0	1000	45	0
SP282ABGNC	RA	MR141055	R1	CY8C24533-24PVXI	150/-65	0	500	30	0
SP282ABGNC	RA	MR141055	R1	CY8C24533-24PVXI	150/-65	0	1000	30	0
SP2024CAGL	M	MR142020	R1	CY8C21334-24PVXA	150/-65	0	500	28	0
SP2024CAGL	M	MR142020	R1	CY8C21334-24PVXA	150/-65	0	1000	28	0



SP483MBGNC	RA	MR142052	R1	CY8C29666-24PVXI	150/-65	0	500	77	0
SP483MBGNC	RA	MR142052	R1	CY8C29666-24PVXI	150/-65	0	1000	77	0
SP483MBGNC	RA	MR142052	R2	CY8C29666-24PVXI	150/-65	0	500	77	0
SP483MBGNC	RA	MR142052	R2	CY8C29666-24PVXI	150/-65	0	1000	77	0
SP483MBGNC	RA	MR142052	R3	CY8C29666-24PVXI	150/-65	0	500	77	0
SP483MBGNC	RA	MR142052	R3	CY8C29666-24PVXI	150/-65	0	1000	77	0
SP282ABGNC	RA	MR142061	R1	CY8C24533-24PVXI	150/-65	0	500	30	0
SP282ABGNC	RA	MR142061	R1	CY8C24533-24PVXI	150/-65	0	1000	30	0
SP2023GALC	T	MR142064	R1	CG6865AST	150/-65	0	500	30	0
SP2822BGL	M	MR143003	R1	CY8C21534-12PVXE	150/-65	0	500	29	0
SP2822BGL	M	MR143003	R1	CY8C21534-12PVXE	150/-65	0	1000	24	0
SP282ABGNC	RA	MR143015	R1	CY8C24533-24PVXI	150/-65	0	500	29	0
SP282ABGNC	RA	MR143015	R1	CY8C24533-24PVXI	150/-65	0	1000	29	0
SP563DBCGN	JT	MR143055	R1	CG8082AM	150/-65	0	500	30	0
SP563DBCGN	JT	MR143055	R1	CG8082AM	150/-65	0	1000	30	0
SP282ABGNC	RA	MR144002	R1	CY8C24533-24PVXI	150/-65	0	500	30	0
SP2024CAGL	M	MR144036	R1	CY8C21334-24PVXAT	150/-65	0	500	29	0
SP2024CAGL	M	MR144036	R1	CY8C21334-24PVXAT	150/-65	0	1000	29	0
SP563DBCGN	JT	MR144055	R1	CY7C68013A-56PVXCT	150/-65	0	500	30	0

Summary for Package Family: SSOP (Pb-Free)

30 records

1480 0

Sum

TQFP (Pb-Free)

AZ44ASHLLC	R	134903	R1	CY8C4245AXI4-483	150/-65	0	500	78	0
AZ44ASHLLC	R	134903	R1	CY8C4245AXI4-483	150/-65	0	1000	78	0
AZ44ASHLLC	R	134904	R1	CY8C4245AXI8-483	150/-65	0	500	77	0
AZ44ASHLLC	R	134904	R1	CY8C4245AXI8-483	150/-65	0	1000	77	0



AZ100SJAAL	R	141001	R1	CYONSFN3050A-100AZA	150/-65	0	500	85	0
AZ100SJAAL	R	141001	R1	CYONSFN3050A-100AZA	150/-65	0	1000	84	0
AZ100SJAAL	R	141001	R2	CYONSFN3050A-100AZA	150/-65	0	500	85	0
AZ100SJAAL	R	141001	R2	CYONSFN3050A-100AZA	150/-65	0	1000	85	0
AZ100SJAAL	R	141001	R3	CYONSFN3050A-100AZA	150/-65	0	500	84	0
AZ100SJAAL	R	141001	R3	CYONSFN3050A-100AZA	150/-65	0	1000	84	0
AZ100RRDLL	JT	141302	R2	7C1490XC	150/-65	0	1000	80	0
AZ100RRDLL	JT	141302	R2	7C1490XC	150/-65	0	2000	73	0
AZ44ABAASC	G	141404	R1	CY8C4245AXI-483	150/-65	0	500	80	0
AZ44ABAASC	G	141404	R1	CY8C4245AXI-483	150/-65	0	1000	80	0
AZ44ABAASC	G	141404	R2	CY8C4245AXI-483	150/-65	0	500	80	0
AZ44ABAASC	G	141404	R2	CY8C4245AXI-483	150/-65	0	1000	80	0
AZ44ABAASC	G	141404	R3	CY8C4245AXI-483	150/-65	0	500	80	0
AZ44ABAASC	G	141404	R3	CY8C4245AXI-483	150/-65	0	1000	80	0
AZ100SJAAL	R	142307	R1	CYTMA568-100AS54ZX	150/-65	0	500	80	0
AZ100SJAAL	R	142307	R1	CYTMA568-100AS54ZX	150/-65	0	1000	77	0
AZ100SJAAL	R	142307	R2	CYTMA568-100AA54AI	150/-65	0	500	82	0
AZ100SJAAL	R	142307	R2	CYTMA568-100AA54AI	150/-65	0	1000	77	0
AZ100SJAAL	R	142307	R3	CYTMA568-100AA54BB	150/-65	0	500	82	0
AZ100SJAAL	R	142307	R3	CYTMA568-100AA54BB	150/-65	0	1000	77	0
AZ100SJAAL	R	143210	R1	CYTMA568-100AS54ZX	150/-65	0	500	80	0
AZ100SJAAL	R	143210	R1	CYTMA568-100AS54ZX	150/-65	0	1000	77	0
AZ100SJAAL	R	143210	R2	CYTMA568-100AA54AI	150/-65	0	500	82	0
AZ100SJAAL	R	143210	R2	CYTMA568-100AA54AI	150/-65	0	1000	77	0
AZ100SJAAL	R	143210	R3	CYTMA568-100AA54BB	150/-65	0	500	82	0
AZ100SJAAL	R	143210	R3	CYTMA568-100AA54BB	150/-65	0	1000	77	0



AZ48AAAAAS	T	144403	R1	CY8C4245AZI-483ES	150/-65	0	500	80	0
AZ48AAAAAS	T	144403	R1	CY8C4245AZI-483ES	150/-65	0	1000	80	0
AZ48AAAAAS	T	144403	R2	CY8C4245AZI-483	150/-65	0	500	80	0
AZ48AAAAAS	T	144403	R2	CY8C4245AZI-483	150/-65	0	1000	80	0
AZ48AAAAAS	T	144403	R3	CY8C4245AZI-483	150/-65	0	500	80	0
AZ48AAAAAS	T	144403	R3	CY8C4245AZI-483	150/-65	0	1000	80	0
AZ48BAAAAS	JT	144404	R1	CY8C4245AZI-483ES	150/-65	0	500	77	0
AZ48BAAAAS	JT	144404	R1	CY8C4245AZI-483ES	150/-65	0	1000	77	0
AZ48BAAAAS	JT	144404	R2	CY8C4245AZI-483	150/-65	0	500	76	0
AZ48BAAAAS	JT	144404	R2	CY8C4245AZI-483	150/-65	0	1000	76	0
AZ48BAAAAS	JT	144404	R3	CY8C4245AZI-483	150/-65	0	500	77	0
AZ48BAAAAS	JT	144404	R3	CY8C4245AZI-483	150/-65	0	1000	76	0
AZ32LXGAN	L	MR134059	R1	CY29948AXIT	150/-65	0	500	30	0
AZ100RPAGN	R	MR141069	R1	CY7C1354C-166AXC	150/-65	0	500	30	0
AZ100SGLLC	R	MR141071	R1	CY8C3246AXI-131T	150/-65	0	500	43	0
AZ100SGLLC	R	MR141071	R1	CY8C3246AXI-131T	150/-65	0	1000	43	0
AZ100SGLLC	R	MR141071	R2	CY8C3246AXI-131	150/-65	0	500	44	0
AZ100SGLLC	R	MR141071	R2	CY8C3246AXI-131	150/-65	0	1000	44	0
AZ100SGLLC	R	MR141071	R3	CY8C3244AXI-153	150/-65	0	500	45	0
AZ100SGLLC	R	MR141071	R3	CY8C3244AXI-153	150/-65	0	1000	45	0
AZ32LXGAN	L	MR141076	R1	CY29946AXIT	150/-65	0	500	30	0
AZ64EXGAAL	G	MR142005	R1	CP5790DM	150/-65	0	500	30	0
AZ100RUCLN	JT	MR142019	R2	CY7C1350G-200AXC	150/-65	0	500	30	0
AZ100RBCLN	JT	MR143041	R1	CY7C1370D-167AXI	150/-65	0	500	30	0
AZ100RBCLN	JT	MR143041	R1	CY7C1370D-167AXI	150/-65	0	1000	30	0
AZ100RUCLN	JT	MR143044	R1	CY7C1350G-200AXC	150/-65	0	500	30	0



AZ100RYLNC	JT	MR144014	R1	CY7C1360C-166AXI	150/-65	0	500	45	0
AZ100RYLNC	JT	MR144014	R2	CY7C1360C-166AXI	150/-65	0	500	45	0
AZ100RYLNC	JT	MR144014	R3	CY7C1360C-166AXI	150/-65	0	500	45	0
AZ100RUCLN	JT	MR144059	R1	CY7C1350G-200AXCT	150/-65	0	500	30	0

Summary for Package Family: TQFP (Pb-Free)

60 records

4008 0

Sum

TSOP (Pb-free)

ZT48AIALLC	G	MR134060	R1	CY62167ELL-45ZXI	150/-65	0	500	30	0
ZT48AIALLC	G	MR134069	R1	CY62157EV30LL-45ZXI	150/-65	0	500	28	0
ZT28R2ABGN	JT	MR141021	R1	CY62256NLL-55ZXAT	150/-65	0	500	29	0
ZT28R2ABGN	JT	MR141021	R1	CY62256NLL-55ZXAT	150/-65	0	1000	28	0
ZT32RAEDLN	RA	MR141032	R1	CG7517AAT	150/-65	0	500	30	0
ZT32RBBALL	T	MR141048	R1	CY62128ELL-45ZXAT	150/-65	0	500	30	0
ZT32RABALL	T	MR142026	R1	CY62128ELL-45ZXIT	150/-65	0	500	30	0
ZT32RAEDLN	RA	MR142039	R1	CG7517AAT	150/-65	0	500	30	0
ZT28R2BCLN	JT	MR142062	R1	CY62256NLL-55ZXI	150/-65	0	500	30	0
ZT28R2ABGN	JT	MR143001	R1	CY62256NLL-55ZXAT	150/-65	0	500	29	0
ZT28R2ABGN	JT	MR143001	R1	CY62256NLL-55ZXAT	150/-65	0	1000	28	0
ZT32RBBALL	T	MR143053	R1	CY62128ELL-45ZXAT	150/-65	0	500	30	0
ZT48AIALLC	G	MR144001	R1	CY62167EV30LL-45ZXI	150/-65	0	500	45	0
ZT48AIALLC	G	MR144001	R2	CY62167EV30LL-45ZXIT	150/-65	0	500	45	0
ZT48AIALLC	G	MR144001	R3	CY62167EV30LL-45ZXI	150/-65	0	500	45	0
ZT32RAEDLN	RA	MR144050	R1	CY62128EV30LL-45ZXIT	150/-65	0	500	30	0



ZT28R2BCLN	JT	MR144051	R1	CY62256NLL-55ZXI	150/-65	0	500	30	0
ZT28R2BCLN	JT	MR144051	R1	CY62256NLL-55ZXI	150/-65	0	1000	30	0
ZT32RABALL	T	MR144058	R1	CY62128ELL-45ZXI	150/-65	0	500	26	0

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

Sum **603** **0**

TSOP I (Pb-Free)

ZB32WRAAGL	G	MR141054	R1	FM28V100-TGTR	150/-65	0	500	30	0
ZB32RHACLN	JT	MR141082	R1	CY62128EV30LL-45ZAXI	150/-65	0	500	29	0
ZB32RHABLN	JT	MR142022	R1	CY62138FV30LL-45ZAXAT	150/-65	0	500	30	0
ZB32FRAAGL	G	MR142047	R1	FM28V100-TGTR	150/-65	0	500	30	0
ZB32FRAAGL	G	MR143030	R1	FM28V100-TG	150/-65	0	500	30	0
ZB32RHABLN	JT	MR144025	R1	CY62138FV30LL-45ZAXAT	150/-65	0	500	30	0

Summary for Package Family: TSOP I (Pb-Free) **6** **records**

Sum **179** **0**

TSOP II (Pb-Free)

ZW544AFLRC	G	114501	R3	CY14B116N-ZSP45XIES	150/-65	0	1000	80	0
ZW544AFLRC	G	114501	R3A	CY14E116N-ZSP45XIES	150/-65	0	500	80	0
ZW544AFLRC	G	114501	R3A	CY14E116N-ZSP45XIES	150/-65	0	1000	80	0
ZW544AFLRC	G	123003	R1	CY14B116N-ZSP45XIES	150/-65	0	1000	80	0
ZW544AFLRC	G	123003	R2	CY14E116N-ZSP45XIES	150/-65	0	500	80	0
ZW544AFLRC	G	123003	R2	CY14E116N-ZSP45XIES	150/-65	0	1000	80	0
ZW444AFLRC	G	123003	R3	CY14B116L-ZS45XIES	150/-65	0	500	80	0
ZW54BGALL	G	135101	R1	CY7C1061DV33-10ZSXI	150/-65	0	1000	77	0
ZW54BGALL	G	135101	R2	CY7C1061DV33-10ZSXI	150/-65	0	1000	77	0



ZW54BGALL	G	135101	R3	CY7C1061DV33-10ZSXI	150/-65	0	1000	77	0
ZW54BGALL	G	135101	R4	CY7C1061DV33-10ZSXI	150/-65	0	1000	77	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	150/-65	0	500	80	0
ZW44BRXAGL	G	141003	R1	FM28V202A-TG	150/-65	0	1000	80	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	150/-65	0	500	79	0
ZW44BRXAGL	G	141003	R2	FM28V202A-TG	150/-65	0	1000	79	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	150/-65	0	500	80	0
ZW44BRXAGL	G	141003	R3	FM28V202A-TG	150/-65	0	1000	80	0
ZW444WBLNC	JT	141303	R1	CY7C1049DV33-10ZSXIKJ	150/-65	0	1000	80	0
ZW444AMLNC	JT	141303	R2	CY62146ESL-45ZSXIKJ	150/-65	0	1000	80	0
ZW444AMLNC	JT	141303	R2	CY62146ESL-45ZSXIKJ	150/-65	0	2000	73	0
ZW444AMLNC	JT	141303	R3	CY62147EV30LL-45ZSIKJ	150/-65	0	1000	80	0
ZW44BRXAGL	G	142501	R1	FM22L16-55-TG	150/-65	0	500	80	0
ZW44BRXAGL	G	142501	R1	FM22L16-55-TG	150/-65	0	1000	80	0
ZW44ABYAGL	RA	143301	R1	CY62146EV30LL-45ZSXI	150/-65	0	500	80	0
ZW44ABYAGL	RA	143301	R1	CY62146EV30LL-45ZSXI	150/-65	0	600	80	0
ZW44ABYAGL	RA	143301	R1	CY62146EV30LL-45ZSXI	150/-65	0	1000	80	0
ZW44BRXAGL	G	MR141035	R1	FM22L16-55-TG	150/-65	0	500	30	0
ZW444AOLN	JT	MR142008	R1	CY62146EV30LL-45ZSXAT	150/-65	0	500	30	0
ZW324FBGL	T	MR142045	R1	CY7C1019CV33-10ZXA	150/-65	0	500	30	0
ZW444ALLR	G	MR142053	R1	CY7C1051DV33-12ZSXI	150/-65	0	500	30	0
ZW44AXYAGL	RA	MR143005	R1	CY7C1041DV33-10ZSXI	150/-65	0	500	30	0
ZW44AXYAGL	RA	MR143005	R1	CY7C1041DV33-10ZSXI	150/-65	0	1000	30	0
ZW44BRXAGL	G	MR143023	R1	FM22L16-55-TGTR	150/-65	0	500	30	0
ZW444AOLN	JT	MR143036	R2	CY62146EV30LL-45ZSXA	150/-65	0	500	30	0
ZW44AYAGLC	RA	MR144010	R1	CY7C1041DV33-10ZSXI	150/-65	0	500	30	0



ZW444WBLNC	JT	MR144013	R1	CY7C1041DV33-10ZSXIT	150/-65	0	500	45	0
ZW444WBLNC	JT	MR144013	R1	CY7C1041DV33-10ZSXIT	150/-65	0	1000	45	0
ZW444WBLNC	JT	MR144013	R2	CY7C1041DV33-10ZSXIT	150/-65	0	500	45	0
ZW444WBLNC	JT	MR144013	R2	CY7C1041DV33-10ZSXIT	150/-65	0	1000	45	0
ZW444WBLNC	JT	MR144013	R3	CY7C1041DV33-10ZSXIT	150/-65	0	500	45	0
ZW444WBLNC	JT	MR144013	R3	CY7C1041DV33-10ZSXIT	150/-65	0	1000	45	0
ZW44BRXAGL	G	MR144026	R1	FM22L16-55-TG	150/-65	0	500	30	0
ZW324GALL	T	MR144052	R1	CY7C1019DV33-10ZSXIT	150/-65	0	500	30	0
ZW444ALLR	G	MR144056	R1	CY7C1059DV33-10ZSXI	150/-65	0	500	30	0

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

44 records

2689 0

Sum

TSSOP (Pb-Free)

ZZ0812BGL	T	MR141022	R1	CY2304NZZXI-1T	150/-65	0	500*	30	0
ZZ1620GBAN	RA	MR141060	R1	CY22393FXCT	150/-65	0	500	30	0
ZZ2014BGN	T	MR142027	R1	CG7734AAT	150/-65	0	500	30	0
ZZ2014BGN	T	MR142027	R1	CG7734AAT	150/-65	0	1000	30	0
ZZ0812BGL	T	MR142029	R1	CY2304NZZXI-1T	150/-65	0	500	30	0
ZZ1620GANC	RA	MR142043	R1	CY22394FXCT	150/-65	0	500	29	0
ZZ1620GANC	RA	MR142043	R1	CY22394FXCT	150/-65	0	1000	29	0
ZZ1620GBAN	RA	MR143024	R1	CY22393FXCT	150/-65	0	500	30	0
ZZ0812BGL	T	MR143038	R1	CY2304NZZXI-1T	150/-65	0	500	30	0
ZZ2014BGN	T	MR144007	R1	CG7732AAT	150/-65	0	500	30	0
ZZ1620GBAN	RA	MR144021	R1	CY22393FXCT	150/-65	0	500	30	0



ZZ0812BGL	T	MR144037	R1	CY2304NZZXC-1T	150/-65	0	500	30	0
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ZZ1620GBAN	RA	MR151020	R1	CY22393FXCT	150/-65	0	500	30	0
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Summary for Package Family: TSSOP (Pb-Free) **13** **records**

Sum							388	0
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PLCC (Pb-Free)

JZ32RGBAN	M	MR141011	R1	CY7B991V-5JXI	150/-65	0	500*	13	0
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JZ32RGBAN	M	MR141011	R1	CY7B991V-5JXI	150/-65	0	1000*	13	0
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Summary for Package Family: PLCC (Pb-Free) **2** **records**

Sum							26	0
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Document History Page

Document Title: 2015 Q1 RELIABILITY REPORT
Document Number: 001-97620

Rev.	ECN No.	Orig. of Change	Description of Change
**	4765288	JYF	Initial spec release.
*A	5753060	JYF SLLO	Sunset Review: Deleted obsolete spec# 25-00039 and replaced with 25-20001; Updated CY logo. Removed Distribution and Posting from the document history page.