
TO: All Pericom Customers

DATE: November 21, 2007

SUBJECT: Pericom Plastic IC Package MSL (Moisture Sensitivity Level and Soldering Profile Information)

Pericom's Integrated Circuit (IC) products are enclosed in plastic encapsulated or plastic covered substrate, Surface Mount Technology (SMT) packages. They have been evaluated by Moisture Sensitivity Testing (MST) and Moisture Resistance Testing (MRT), and depending on package size found to be in compliance with the applicable MSL Level requirements of the latest revisions to industry standard specifications: IPC/JEDEC J-STD-020D and JESD22-A113, for both Sn/Pb and Pb-free terminations.

Unless otherwise designated on the packaging MSL label, Pericom's Small Outline (SO) QSOP, BQSOP, SOIC (SOP), SSOP, MSOP, TSSOP, SOT-23, SC-70, CSP, DFN, and QFN type packages meet MSL 1, and therefore do not require bake or dry pack prior to shipment. Depending on package thickness and volume as indicated in the attached Tables 1 or 2, they are capable of withstanding 3 cycles of IR / Convection / Forced Air (N₂) reflow profiled to a recommended maximum peak temperature of 220 or 235°C for packages using Sn/Pb plating; and 245, 250 or 260°C for Pb-free.

Pericom products that are not shipped in dry-pack containers will not need storage in a specially controlled temperature and humidity environment prior to use. The floor life is unlimited up to 30°C and 85% RH. No board mount/reflow package damage should occur with product when utilizing industry standard SMT Reflow Solder profile methods and temperatures (including ramp rates and dwell times).

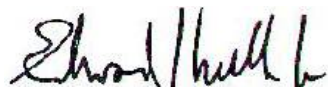
Unless otherwise designated on the packaging MSL label, Pericom's BGA (PBGA, LFBGA, TFBGA), QFP (LQFP, TQFP) and PLCC type packages currently require bake and/or dry pack prior to shipment as they are rated at either MSL 2 or 3. Depending on package thickness and volume as indicated in the attached Tables 1 or 2, they are capable of withstanding 3 cycles of IR / Convection / Forced Air (N₂) reflow profiled to a recommended maximum peak temperature of 220 or 235 for packages using Sn/Pb plating; and 245, 250 or 260°C for Pb-free.

All Pericom products using 100% matte Sn as terminal solder coatings also receive post-plating anneal bake at 150C for 1 hour to prevent Tin Whisker growth. Subcontractor tests per JESD22-A121 and NEMI Tin Whisker Acceptance Test Requirements (Class 2) confirmed no whisker growth in excess of a 40µm limit.

Pericom ensures maximum protection against moisture penetration because our plastic encapsulated/covered substrate packages are designed using the most appropriate epoxy and leadframe/substrate materials applicable to the type of package being assembled. Pericom's IC chips also use a silicon nitride (SN₂) topside passivation to help reduce the possibility of moisture corrosion to the device metallization.

If there are any questions or more information needed on this issue, please contact me at your convenience.

Regards,



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