M29320-13
Alert Information-Lid Adhesion on FCBGA Products
Product Bulletin
Products Affected: M29320, M29306, M29313, M29314, M29316, M29323, M29326, M21131, M21136, M21141, M21150, M21151, M21156, M21161

Introduction
This document is written to inform and alert customers about a potential problem that can cause the device lid to become detached over time when a glued heat sink is applied to the above listed products.

NOTE: Separate Product Bulletins will also be issued for the M29306, M29313/4/6, M29323/6, M21131, M21136, M21141, M21150, M21151, M21156, M21161 devices.

Description
Loctite 7387 Activator can cause poor lid adhesion on FCBGA packaged devices such as the M29320 device. Loctite activator is used by many assembly houses to "activate" the glue on the bottom of heat sinks which are applied to the device for cooling purposes. When the activator is allowed to overflow the edge of the device and seep into its lid/ring interface, it can penetrate and in-turn soften the adhesive that glues the device lid and ring together. The contact between the Loctite activator and the adhesive will not cause a problem at room temperature. However, when the device is heated, the activator that has penetrated the lid/ring interface acts to cook the lid's adhesive which causes it to lose its bonding properties. The lid, weighted with the heavy heatsink, can become loose and dislodge when bumped or vibrated.

Workaround
This problem does not occur for customers who use bolted down heat sinks. However, for customers that use the Loctite 7387 Activator for non-mechanically attaching heatsinks, Mindspeed recommends ensuring that the Activator does not overflow the edge of the FCBGA packaged device.