PRODUCT CHANGE NOTICE

1. TITLE
Crescent Compound Bond System, Wire Bond Process

2. DOCUMENT NUMBER
FV5-C-06-02

3. DATE
24 MAY 2006

4. MANUFACTURER AND ADDRESS
International Rectifier, HiRel Products
2270 Martin Ave.
Santa Clara, CA 95050

5. MANUFACTURER PART NUMBER
All IR HiRel DC/DC Converter Hybrids

6. BASE PART
NOT AVAILABLE

7. NATIONAL STOCK NUMBER (NSN)
5962

8. CAGE
52467

9. EFFECTIVE DATE
Feb 1, 2006 (Taiwan)
May 1, 2006 (Santa Clara)

10. GOVERNMENT NUMBER
NOT AVAILABLE

11. POINT OF CONTACT
MANUFACTURER’S REPRESENTATIVE OR CUSTOMER SERVICE REPRESENTATIVE
(978) 534-5776

12. DRAWING NUMBER
QML-38534

13. SPECIFICATION NUMBER
MIL-PRF-38534, Class H, K, E

14. PRODUCT CHANGE
This product change notice affects all IR HiRel DC/DC Converters, AD/DA Converters and Amplifier hybrid microcircuit related products. These include, but not limited to IR for the DC/DC series, AFL, M3G, LS, ART, and AHP product families, manufactured under the guidelines of MIL-PRF-38534. These products are currently manufactured at International Rectifier – Santa Clara, and its subcontractor Universal Scientific Industrial Co. in Taiwan.

International Rectifier announces the implementation of a crescent compound (security) bond system with its hybrid designs in an effort to enhance interconnect reliability with 0.001 and 0.0007 gold wire. This process involves the overlay of a compound bond over the exit of the crescent bond (see figure 1 below for exhibit). Studies conducted by International Rectifier have shown that the use of crescent compound bond system may not be completely justified in itself, however when considering the potential hazards linked with small wire bonding on thick film, the use of crescent compound bonds gain merit and is considered highly prudent. The benefit for using such wire bond system is to provide assurance against premature crescent bond failures due to factors and effects that may cause them to become weakened (e.g., Environmental and Mechanical Stress, 100% Non-Destruct Bond Pull, etc.). The use of crescent compound bonds over the crescent bond provides such assurance for high reliability, dense hybrid designs. As such IR HiRel Products, Santa Clara has incorporated this system as part of its MIL-PRF-38534 QML process technology.

Figure 1 – Crescent Bond Placement and Criteria

15. APPROVAL DATE
NOT AVAILABLE

16. APPROVING GOVERNMENT ACTIVITY
NOT AVAILABLE

17. REPRESENTATIVE
PAUL HEBERT

18. SIGNATURE

19. DATE
MAY 24, 2006