

Process Change Notification

Date: April 2, 2013
PCN Reference: S13212-S20391
PCR Reference: P-1239-MD-0638 and P-1118-MD-0500
Product Reference: PDIP 8L, 14L and 16L HVIC Gen 1 and 2

To Our Valued Customer:

As always we appreciate your use of International Rectifier semiconductor products. Our commitment to customer satisfaction and continuous improvement is demonstrated by our change plans to enhance capacity, quality and reliability. This notice is to inform you of the following change:

Type of Change Notification:

Bill of Material change used for the assembly of PDIP Gen 1 and 2 products in Hana, Thailand and Carsem, Malaysia.

Description of Change:

Materials Qualified in Hana, Thailand (8L) and Carsem, Malaysia (8L, 14L, 16L)

Material	Current	Proposed
Wire	Au wire	Cu wire
Mold compound	6650RL-1L	CEL8240HF10

Current products use Gold wire to provide the electrical connection between the package leads and die. The wire material will change from Gold to Copper but the number of wires and the die remain the same. The electrical conduction properties of Copper are comparable to gold. The datasheets will remain unchanged.

There will be a period of time which either gold or copper wire bond material will be used in manufacturing during transition.

Marking

The part marking will be updated to include an underscore after the last digit of the Lot code to identify the part as a Copper wire based device.



Reason for the Change:

Qualification of Copper wire will enable IR to expand the assembly capacity to effectively support the customer demand. Current capacity will be extended to the existing Cu wire set-up.

Effect Date:

July 2, 2013

International Rectifier will consider this change approved and will implement it by the effective date unless specific conditions of acceptance or sample requests are provided in writing within 30 days of receipt of this notice. Please submit conditions of acceptance and data requests to the PCN coordinator listed at the end of this notice.

Impact of Change:

The Fit and Function do not change as a result of the conversion. Datasheets will remain unchanged.

Products Affected:

Part Number	Description
98-0245PBF	#N/A
98-0265PBF	#N/A
98-0310PBF	#N/A
IR2010PBF	High and Low Side Driver in a 14-pin DIP package
IR2011PBF	High and Low Side Driver in a 8-Lead PDIP package
IR2101PBF	High and Low Side Driver, Noninverting Inputs in a 8-pin DIP package
IR2102PBF	High and Low Side Driver, Inverting Inputs in a 8-pin DIP package
IR2103PBF	Half Bridge Driver, Separate High and Low Side Inputs, Inverting Low Side Input, Fixed 520ns Deadtime in a 8-pin DIP package
IR2104PBF	Half Bridge Driver, Single Input Plus Inverting Shutdown Pin, Fixed 520ns Deadtime in a 8-pin DIP package
IR21064PBF	High and Low Side Driver, SoftTurn-On, Noninverting Inputs, All High Voltage Pins on One Side, Separate Logic and Power Ground in a 14-pin DIP package
IR2106PBF	High and Low Side Driver, SoftTurn-On, Noninverting Inputs in a 8-pin DIP package
IR21084PBF	Half Bridge Driver, Soft Turn-On, All High Voltage Pins on One Side, Separate High and Low Side Inputs, Programmable 0.5-5us Deadtime in a 14-pin DIP package
IR2108PBF	Half Bridge Driver, Soft Turn-On, Separate High and Low Side Inputs, Fixed 500ns Deadtime in a 8-pin DIP package
IR21091PBF	Half Bridge Driver, Soft Turn-On, Single Input Plus Shut-Down, Programmable 0.5-5us Deadtime in a 8-pin DIP package



IR21094PBF	Half Bridge Driver, Soft Turn-On, Single Input Plus Shut-Down, All high Voltage Pins on One Side, Programmable 0.5-5us Deadtime in a 14-pin DIP package
IR2109PBF	Half Bridge Driver, Soft Turn-On, Single Input Plus Shut-Down, Fixed 500ns Deadtime in a 8-pin DIP package
IR2110PBF	High and Low Side Driver, All High Voltage Pins On One Side, Separate Logic and Power Ground, Shut-Down in a 14-pin DIP package
IR2111PBF	Half Bridge Driver, Fixed 650ns Deadtime in a 8-pin DIP package
IR2112PBF	High and Low Side Driver, Shutdown Input in a 14-pin DIP package
IR2113PBF	High and Low Side Driver, All High Voltage Pins On One Side, Separate Logic and Power Ground, Shut-Down in a 14-pin DIP package
IR2117PBF	Single High Side Driver, Noninverting Input in a 8-pin DIP package
IR2118PBF	Single High Side Driver, Inverting Input in a 8-pin DIP package
IR2121PBF	Single Low Side Driver, Current Limiting, Programmable Shutdown Error Pin in a 8-pin DIP package
IR2125	Single High Side Driver, Current Limiting, Programmable Shutdown Error Pin in a 8-pin DIP package
IR2125PBF	Single High Side Driver, Current Limiting, Programmable Shutdown Error Pin in a 8-pin DIP package
IR21271PBF	Single High Side Driver, Noninverting Inputs, Current Sensing, Overcurrent Detection and Shutdown Fault Output in a 8-lead SOIC package
IR2127PBF	Single High Side Driver, Noninverting Inputs, Current Sensing, Overcurrent Detection and Shutdown Fault Output in a 8-pin DIP package
IR2128PBF	Single High Side Driver, Inverting Inputs, Current Sensing, Overcurrent Detection and Shutdown Fault Output in a 8-pin DIP package
IR21531DPBF	Half Bridge Driver, LO In Phase with RT, Programmable Oscillating Frequency, 0.6us Deadtime in a 8-pin DIP package and different phase
IR21531PBF	Half Bridge Driver, LO In Phase with RT, Programmable Oscillating Frequency, 0.6us Deadtime in a 8-pin DIP package and different phase
IR2153DPBF	Half Bridge Driver, LO In Phase with RT, Programmable Oscillating Frequency, 0.6us Deadtime in a 8-lead DIP package and different phase
IR2153PBF	Half Bridge Driver, LO In Phase with RT, Programmable Oscillating Frequency, 0.6us Deadtime in a 8-lead DIP package and different phase
IR2155PBF	Ballast Control, Below Resonance Protection, Thermal Overload Protection, Protection from Failure to Strike, Programmable Preheat Time and Run Frequency, Programmable Deadtime, Automatic Restart for Lamp Exchange in a 16-pin DIP package
IR2156PBF	Ballast Control, Programmable Preheat Time and Run Frequency, Programmable Deadtime in a 14-pin DIP package
IR21571PBF	Ballast Control, Below Resonance Protection, Thermal Overload Protection, Protection from Failure to Strike, Programmable Preheat Time and Run Frequency, Programmable Deadtime, Automatic Restart for Lamp Exchange in a 16-pin DIP package
IR21592PBF	Dimming Ballast Control, Brown-out Protection, Programmable Preheat Time, 1.8us Deadtime in a 16-pin DIP package
IR2161PBF	Halogen Converter Control IC in a 8-lead PDIP package. Features Auto Resetting Short Circuit Protection, Auto Resetting Overload Protection, Overtemperature Protection, Phase Cut Dimmable, Adaptive Deadtime, Output Voltage Shift Compensation and Softsta
IR2166PBF	PFC Ballast Control in a 16-pin DIP package



IR2172SPBF	Linear Current Sensing IC in a 8-Lead DIP package
IR2175PBF	Linear Current Sensing IC in a 8-Lead DIP package
IR21814PBF	High and Low Side Driver, SoftTurn-On, Noninverting Inputs, Separate High and Low Side Inputs, All High Voltage Pins On One Side, Separate Logic and Power Ground in a 14-pin DIP package
IR2181PBF	High and Low Side Driver, SoftTurn-On, Noninverting Inputs, Separate High and Low Side Inputs in a 8-pin DIP package
IR21834PBF	Half Bridge Driver, SoftTurn-On, Low Side Inverting Inputs, Separate High and Low Side Inputs, All High Voltage Pins On One Side, Separate Logic and Power Ground, Programmable Deadtime in a 14-pin DIP package
IR2183PBF	Half Bridge Driver, SoftTurn-On, Low Side Inverting Input, Separate High and Low Side Input, 500ns Deadtime in a 8-pin DIP package
IR21844PBF	Half Bridge Driver, SoftTurn-On, Single Input Plus Inverting Shut-Down, All High Voltage Pins on One Side, Separate Logic and Power Ground, Programmable Deadtime in a 14-pin DIP package
IR2184PBF	Half Bridge Driver, SoftTurn-On, Single Input Plus Inverting Shut-Down, 500ns Deadtime in a 8-pin DIP package
IR2213PBF	High and Low Side Driver, Noninverting Inputs in a 14-pin DIP package
IR2301PBF	High and Low Side Driver, SoftTurn-On, Noninverting Inputs in a 8-pin DIP package
IR2302PBF	Half Bridge Driver, Soft Turn-On, Single Input Plus Shut-Down, Fixed 500ns Deadtime in a 8-pin DIP package
IR2304PBF	Half Bridge Driver, SoftTurn-On, Noninverting Inputs in a 8-pin DIP package
IR2308PBF	High Voltage and High Speed power MOSFET and IGBT Half Bridge Driver in a 8-pin DIP package
IR2520DPBF	600V Ballast Controller IC with Adaptive Zero-Voltage Switching, Internal Crest Factor Over-Current Protection and an Integrated Bootstrap Diode in a 8-Pin Dip package.
IR25600SPBF	Low voltage, high speed power MOSFET and IGBT driver
IR25603SPBF	High voltage half-bridge gate driver with a front end oscillator
IR4426PBF	Dual Low Side Driver, Inverting Input in a 8-pin DIP package
IR4427PBF	Dual Low Side Driver in a 8-pin DIP package
IR4428PBF	Dual Low Side Driver, Half Inverting Input in a 8-pin DIP package

Qualification:

Parts passed all the reliability testing requirements. Reliability qualification report is available upon request. Qualification standards can be found on International Rectifier’s web site at www.irf.com/product-info/reliability.

Data Availability:

Please contact the PCN Coordinator for supporting data.

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