HOLT INC.
INTEGRATED CIRCUITS

Addition of SPEL Semiconductor, India for QFN, TSSOP & SOIC Package Assembly

Product Change Notice PCN1202 (v2.0) November 20, 2013

Overview

The purpose of this notification is to announce the addition of SPEL Semiconductor, India assembly facility for QFN, TSSOP and Small Outline (SOIC) packages for Holt's ARINC 429, ARINC 825, MIL-STD 1553, and Discrete to Digital family of devices.

Description

Added SPEL Semiconductor's India assembly facility to Holt's qualified supplier list as an approved QFN, TSSOP and SOIC package subcontract manufacturer to increase manufacturing capacity for products being assembled in these package types. SPEL Semiconductor's India facility has achieved facility certification to ISO 9001:2008, ISO/TS 16849-2002 and ISO 14001-2004 More information is available at SPEL's website: http://www.spel.com.

The TSSOP (20L & 38L), SOIC (20L) and the QFN (16, 44 & 64) package assemblies are fully qualified at SPEL Semiconductor (See Qualification Data in Table 2).

This PCN change type is for Form for the TSSOP and SOIC packages and for Form and FIT for the QFN packages. There is no change to Function, Quality or Reliability. FIT change for QFN package include heat sink size increase from 5.15mm^2 to 5.5mm^2 squared for 44 QFN and 6.8mm^2 to 7.25mm^2 for 64 QFN.

Reason

Holt Integrated Circuits has been notified that their current assembly supplier CEI has been severely impacted due to flooding in Thailand and will sustain significant delays in returning to full assembly and manufacturing capability.

Products Affected

All parts listed are affected by this change. This includes devices in both the standard and Pb-free packages and devices in all grades; industrial, extended temperature and extended temperature with burn-in.

Table 1:

HI-1565PCx	HI-3113PCx	HI-3582APCx	HI-3587PCx	HI-6110PCx	HI-8423PTx
HI-1566PCx	HI-3200PCx	HI-3582APCx-15	HI-3588PCx	HI-6121PCx	HI-8424PTx
HI-1567PCx	HI-3210PCx	HI-3583APCx	HI-3596PCx	HI-6131PCx	HI-8444PSx
HI-1568PCx	HI-3582PCx	HI-3583APCx-15	HI-3596PCx-40	HI-8448PCx	HI-8444PSx-10
HI-1570PCx	HI-3582PCx-10	HI-3584PCx	HI-3598PCx	HI-8448PCx-10	HI-8445PSx
HI-1573PCx	HI-3583PCx	HI-3584APCx-15	HI-3599PCx	HI-8591PCx	HI-8445PSx-10
HI-1574PCx	HI-3583PCx-10	HI-3582PCx	HI-3599PCx-40	HI-8591PCx-40	HI-8448PSx
HI-1579PCx	HI-3584PCx	HI-3585PCx	HI-3717PCx	HI-8592PCx	HI-8448PSx-10
HI-1581PCx	HI-3584PCx-10	HI-3586PCx	HI-3593PCx	HI-8596PCx	HI-1575PCx

Traceability

A Date Code and Country of Origin facilitate package traceability. Parts from Table 1 can be shipped with a Date Code of 1145 or later, beginning February 1, 2012.

Qualification Data

Table 2:

Reliability Test	Requirement	Results	Results	Results
		QR-1206 Rev 1.0 64 QFN (SPEL)	QR-1202 Rev 1.0 20L SOIC-WB (SPEL)	QR-1207 Rev 1.0 38L TSSOP (SPEL)
Precondition (PC)	MSL 3	11/0	11/0	11/0
PC + HAST	96 hrs	22/0	22/0	22/0
PC + PCT	168 hrs	22/0	22/0	22/0
PC + Temp Cycle	500 cycles	22/0	22/0	22/0
PC + HTS	1000 hrs	22/0	22/0	22/0

Response

Note: In accordance with JESD46-C, this change is deemed accepted by the customer if no acknowledgement is received within 30 days from this notice.

No response is required. For additional information or questions, please contact:
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Revision History

The following table shows the revision history for this document.

Date	Version	Revision Description
1/20/12	1.0	Initial Release
11/20/13	2.0	Added FIT change – QFN package (heat sink change)