

**Product Change Notice**

PCN0805 (v1.0) September 12, 2008

**Overview**

This notice describes the changes to the 52-Lead Quad Flat Pack (QFP) Package for the ARINC 429, MIL-STD 1553, and LCD Display Driver family of devices.

**Description**

Devices currently being assembled in the 52-Lead Metric Quad Flat Pack (MQFP) Package from CARSEM, Malaysia will be transferred to a 52-Lead Low-Profile Quad Flat Pack (LQFP) Package assembled at CEI, Thailand. This change affects Fit, Form and Quality as indicated below:

- Body thickness from 2.0 mm, MQFP to 1.4 mm, LQFP (Fit)
- Mold Compound from Sumitomo EME 7351LS, MQFP to Sumitomo EME 6600CGL, LQFP (Form)
- Moisture Sensitivity Level rating from 1 to 3. (Quality)

The 52-Lead LQFP package assembly is fully qualified at the CEI, Thailand location. (See Qualification Data in Table 2) CEI, Thailand has been a qualified supplier of Holt plastic parts for over 10 years and is ISO/ TS 16949 certified. Holt has been in production with their 44-Lead LQFP since August 2007.

This package transfer will result in a change to the Moisture Sensitivity Level rating of the products in Table 1. The MSL 3 rating is due to the re-qualification required at the increased Pb+ free temperature reflow requirements of J-STD-020D.01.

There is no change to Function or Reliability of these devices.

**Reason**

The 52-Lead LQFP at CEI Thailand is being added to ensure guaranteed supply of QFP package configuration device products.

**Products Affected**

Table 1 summarizes the products affected by this PCN. All parts listed are affected by this change.

*Table 1: Products Affected*

HI-3582PQI	HI-3583PQI-10	HI-8582PQI	HI-8583PQI-10	HI-6110PQI	HI-8010Q
HI-3582PQIF	HI-3583PQIF-10	HI-8582PQIF	HI-8583PQIF-10	HI-6110PQIF	HI-8010PQI
HI-3582PQT	HI-3583PQT-10	HI-8582PQT	HI-8583PQT-10	HI-6110PQT	HI-8010PQT
HI-3582PQTF	HI-3583PQTF-10	HI-8582PQTF	HI-8583PQTF-10	HI-6110PQTF	HI-8051PQI
HI-3582PQI-10	HI-3584PQI	HI-8582PQI-10	HI-8584PQI	HI-6110PQM	HI-8051PQT
HI-3582PQIF-10	HI-3584PQIF	HI-8582PQIF-10	HI-8584PQIF	HI-6110PQMF	HI-8110PQI
HI-3582PQT-10	HI-3584PQT	HI-8582PQT-10	HI-8584PQT		HI-8110PQT
HI-3582PQTF-10	HI-3584PQTF	HI-8582PQTF-10	HI-8584PQTF		HI-8151PQI
HI-3583PQI	HI-3584PQI-10	HI-8583PQI	HI-8584PQI-10		HI-8151PQT
HI-3583PQIF	HI-3584PQIF-10	HI-8583PQIF	HI-8584PQIF-10		HI-8010Q-11
HI-3583PQT	HI-3584PQT-10	HI-8583PQT	HI-8584PQT-10		HI-8110Q-11
HI-3583PQTF	HI-3584PQTF-10	HI-8583PQTF	HI-8584PQTF-10		HI-8151Q-11

**Traceability**

A Date Code and Country of Origin facilitate package traceability. Parts from Table 1 can be shipped with a Country of Origin of Thailand and a Date Code of 0829 or later, beginning Oct 12, 2008. Product from the CARSEM, Malaysia location will stop shipping upon inventory depletion.

## Qualification Data

Reliability Test	Requirement	Results	
		QR-8013 Rev 2.0 52L-LQFP HI-8583	44L-LQFP HI-3585
Device Characterization	Final Test yield analysis over -55°C and +125°C temperature extremes.	180/0	180/0
Precondition (PC)	MSL 3	11/0	11/0
PC + HAST	96 hrs	45/0	45/0
PC + Autoclave	96 hrs	45/0	45/0
PC + Temp Cycle	1000 cycles	45/0	45/0
PC + HTS	1000 hrs	45/0	45/0

## 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:

Scott Paladichuk (spaladichuk@holtic.com)

Holt Integrated Circuits, 23351 Madero, Mission Viejo, CA 92691, Tel: (949) 859-8800, Fax: (949) 859-9643

## Additional Documentation

Below is a list of documents that are associated with this notice:

- QR-8013 Rev. 2.0 LQFP Package Qualification CEI, Thailand

## Revision History

The following table shows the revision history for this document.

Date	Version	Revision Description
9/12/08	1.0	Initial Release