

**Product Change Notice**

PCN0901 (v1.0) July 28, 2009

**Overview**

This notice describes the changes to the ARINC 429 Differential Line Driver Die Change for the HI-3182PJx and HI-3183PJx.

**Description**

The new design has been characterized against all requirements of the ARINC 429 specification and the Holt HI-3182, HI-3183 Data Sheet. No changes are necessary to the data sheet to accommodate the new die. This change is therefore considered a Form, Fit and Function replacement for the existing Holt product.

- o Die Change 3182 Rev. K , 75 x 130 mils, to 3189 Rev. F, 78 x 160 mils
- o Process Technology Change from 4.0um CMOS one layer metal to 4.0um CMOS two layer metal

The 28 – pin PLCC package assembly is fully qualified at the CEI, Thailand location. CEI, Thailand has been a qualified supplier of Holt plastic parts for over 10 years and is ISO/ TS 16949 certified.

The 4.0um CMOS 2 layer metal semiconductor process is fully qualified at DALSA, Quebec. (See Qualification Data in Table 2) Dalsa, Quebec has been a qualified supplier of Holt wafers for over 10 years is ISO/ TS 16949 certified.

There is no change to Quality or Reliability of these devices. Holt has made a thorough analysis to assure 100% compatibility with the previous die revision.

**Reason**

The 3182 Die has been redesigned to provide enhanced features and package options to customers and to simplify the production flow by reducing the number of revisions.

**Products Affected**

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

*Table 1: Products Affected*

HI-3182PJI	HI-3182PJT	HI-3182PJM	HI-3183PJI	HI-3183PJT	HI-3183PJM
HI-3182PJIF	HI-3182PJTF	HI-3182PJMF	HI-3183PJIF	HI-3183PJTF	HI-3183PJMF

**Traceability**

A Date Code facilitates package traceability. Parts from Table 1 can be shipped with a Date Code of 0920 or later, beginning August 28, 2009. Product from either die type can be shipped until inventory depletion.

**Qualification Data**

Reliability Test	Requirement	Results
		QR-8044 Rev 1.0 HI-3189
Device Characterization	Final Test yield analysis over -55°C and +125°C temperature extremes.	225/0
HTOL	1000 hrs @ 125 °C	45/0
Latch Up	JEDEC – Class I, Level A	6/0
ESD-HBM	JEDEC -Class 2	9/0
Lightning - RTCA DO-160F Section 22	A3XXX Level 3 Waveform 3 & 4	2/0
	B3XXX Level 3 Waveform 3 & 5A	2/0
	Z3XXX Level 3 Waveform 3 & 5B	2/0

## 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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## Additional Documentation

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

- QR-8044 Rev. 1.0 3189 Die Qualification

## Revision History

The following table shows the revision history for this document.

Date	Version	Revision Description
7/28/09	1.0	Initial Release