

# 100mm to 150mm Wafer Conversion for HI-8482 Series of ARINC 429 Products

## **Product Change Notice**

PCN0904 (v1.0) September 10, 2012

### **Overview**

The purpose of this notice is to document the completed conversion of Holt devices manufactured using the 100mm 4.0um CMOS Wafers at Dalsa Semiconductor in Quebec, Canada to Dalsa's 150mm 4.0um CMOS Wafers within the same fab.

## Description

Holt Integrated Circuits has converted the following ARINC 429 products to the already Holt qualified 150mm 4.0 micron CMOS wafer manufacturing line.

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 15 years and is ISO/ TS 16949 certified.

There is no change to Fit, Form, Function, Quality or Reliability of these devices. Product manufactured using die fabricated on the qualified 150mm 4.0 micron CMOS Wafer line at Dalsa Semiconductor is completely compatible with existing product from a functional, parametric, quality, and reliability performance.

The design and electrical specification are per the data sheet. All full characterization over the datasheet specified operating temperature and voltage range has been performed to confirm the device is fully functional and meets all electrical specifications.

### Reason

Holt Integrated Circuits will be able to ensure the continuity of supply of the following products to customers once Dalsa Semiconductor closes their 100mm 4.0 micron CMOS wafer process line.

## **Products Affected**

#### Table 1: Products Affected

| HI-8482C     | HI-8482PSI  | HI-8482J     | HI-8482JF | HI-8482S     |
|--------------|-------------|--------------|-----------|--------------|
| HI-8482CT    | HI-8482PST  | HI-8482JT    | HI-848JTF | HI-8482ST    |
| HI-8482CM-01 | HI-8482PSIF | HI-8482U     | HI-8482UT | HI-8482SM-01 |
| HI-8482CM    | HI-8482PSTF | HI-8482SM-14 | HI-8482D  |              |
| HI-8482CM-14 |             | HI-8482SM    | HI-8482DT |              |

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

## **Traceability**

There will be no changes to product ordering codes or marking. Holt maintains traceability of product to the wafer level through the lot number and date code marked on the package. Beginning April 01, 2009 shipments can be built using wafers from either 150mm or 100mm until inventory of the 100mm line is depleted. This wafer conversion will result in a die revision change for the HI-8482 product from Revision C to Revision P.

HI-8482J, Rev P begins with date code 1017 HI-8482PSI, Rev P begins with date code 1020 HI-8482CM-01, Rev P begins with date code 1040 HI-8482SM-01, Rev P begins with date code 1046

# Qualification Data

| Stress/Test   | Test Conditions   | Industry Standard | Accept<br>Criteria<br>Fail/SS | Device     |
|---|---|-------------------|-------------------------------|------------|
| High Temperature Operating<br>Life                    | Static Operating Condition,<br>Tj ≥+125 °C, Vcc ≥ Vccmax,<br>168, 500, & 1000 Hrs | JESD22-A108       | 0/45                          | HI-8482PSx |
| Latch-up  | Ta = +25°C  | JESD78            | 0/6                           |            |
| Electrostatic Discharge Human<br>Body Model (ESD_HBM) | $Ta = +25^{\circ}C$   | JESD22-A114       | Classification                |            |

Successful qualification of this selected product qualifies all other listed products in this device type.



## 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:

O QR-9021 Rev 1.0 HI8482 Rev P 150mm Wafer Conversion.

## **Revision History**

The following table shows the revision history for this document.

| Date     | Version | Revision Description |
|----------|---------|----------------------|
| 09/10/12 | 1.0     | Initial Release      |