

PRODUCT CHANGE NOTIFICATION (PCN)

PCN INFORMATION

PCN #	0704	Date:	12/03/07
Title	ARINC 429 Line Driver Die Change for HI-8585 & HI-8586 Products	Date Effective:	12/03/07
Contact:	Scott Paladichuk	Title:	Director of Quality
Phone #:	949-859-8800	Attachment:	Yes
Fax #:	949-859-9643	Samples:	Available
E-mail:	spaladichuk@holtic.com		

MEANS OF DISTINGUISHING CHANGED DEVICES

Product Mark
 Back Mark
 Date Code
 Other

Please see attachment for Date Codes

CHANGE TYPE

<input checked="" type="checkbox"/> Design	<input type="checkbox"/> Electrical Specification	<input type="checkbox"/> Mechanical Specification
<input type="checkbox"/> Wafer Fab Site	<input type="checkbox"/> Wafer Fab Material	<input type="checkbox"/> Wafer Fab Process
<input type="checkbox"/> Assembly Site	<input type="checkbox"/> Assembly Material	<input type="checkbox"/> Assembly Process
<input type="checkbox"/> Test Site	<input type="checkbox"/> Test Process	<input type="checkbox"/> Packing/Shipping/Labeling
<input type="checkbox"/> Other: _____		

DETAILS

DESCRIPTION OF CHANGE:
Die Change from HI8590 to HI8595 for all HI-8585 & HI-8586 product

- REASON FOR CHANGE:**
1. Replace the zener diode-based voltage reference cells with highly stable band-gap style voltage reference cells, which are not susceptible to drift or variation during exposure to temperature extremes encountered during PCB solder re-flow processes.
 2. To tightly reference the ARINC 429 NULL voltage to the chip GND.
 3. To allow the use of industry best-practice Nitride Passivation layers.

PRODUCT AFFECTED:
HI-8585 & HI-8586, all package options

RELIABILITY/QUALIFICATION SUMMARY:
Please see attachment for reliability data.

Customer Acknowledgement of Receipt of PCN

Holt records indicate that you require written notification of this change. Please acknowledge below or e-mail to grant approval or request additional information. If Holt does not receive acknowledgement within 30 days of this notice it will be assumed that this change is acceptable.

Holt reserves the right to ship either version manufactured after the process change effective date until the inventory on the early version has been depleted.

Customer Signature/Date _____	<input type="checkbox"/> Approval for shipments prior to effective date
HOLT ACKNOWLEDGEMENT OF RECEIPT: RECEIVED BY: _____	Date _____

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ATTACHMENT I INFORMATION – PCN 0704

PCN Type: **Design Change**
 Title: **ARINC 429 Line Driver Die Change for HI-8585 & HI-8586**

Data Sheet Change: **No**

Detail of Change: **The new design has been characterized against all requirements of the ARINC 429 specification and the Holt HI-8585 & HI-8586 Data Sheets. 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 products.**

Please see Table 2 as shown below for when die change was implemented by date code

Detail of Reliability

Table 1
Qualification results for the HI8595 die from Lot 3788, Date Code 0643 are as follow:

Stress/Test	Test Condition (Temp/Bias)	SS/Accept #	Result P/F
High Temperature Operating Life	Static Operating Condition, Vcc Max = 15.0V, 125°C, 1000 Hrs	45/0	P
High Temperature Storage Life	150°C, 1000 Hrs.	45/0	P
High Accelerated Saturation Test (HAST)*	130 °C 85%RH 2atm, Biased 96 Hrs.	45/0	P
Temperature Cycle*	-65°C to +150 °C, 1000 cycles	45/0	P
Pressure Pot*	121 °C 100%RH 2atm, 96 Hrs.	45/0	P
Latch-up	Holt Specification	9/0	P
Electrostatic Discharge Human Body Model (ESD_HBM)	+/- 4000 V MIL-STD-883, Method 3015	10/0	P
Noted samples (*) were subjected to preconditioning prior to start of stress test.			

Detail of Date Code Implementation

Table 2

Affected Parts	Date Code	Affected Parts	Date Code
HI-8585PSI	0728	HI-8586PSI	0640
HI-8585PSIF	0730	HI-8586PSIF	0730
HI-8585PST	0730	HI-8586PST	0730
HI-8585PSTF	0730	HI-8586PSTF	0730
HI-8585PSM	0730	HI-8586PSM	0730
HI-8585PSMF	0730	HI-8586PSMF	0730
HI-8585PDI	0730	HI-8586PDI	0730
HI-8585PDIF	0730	HI-8586PDIF	0730
HI-8585PDT	0730	HI-8586PDT	0730
HI-8585PDTF	0730	HI-8586PDTF	0730
HI-8585PDM	0730	HI-8586PDM	0730
HI-8585PDMF	0730	HI-8586PDMF	0730
HI-8585CRI	0801	HI-8586CRI	0801
HI-8585CRT	0801	HI-8586CRT	0801
HI-8585CRM	0801	HI-8586CRM	0801