



Integrated Device Technology, Inc.
6024 Silver Creek Valley Road, San Jose, CA - 95138

PRODUCT/PROCESS CHANGE NOTICE (PCN)

PCN #: **N1101-03** DATE: **February 1, 2011**

Product Affected:
841S02BGI 841S02BGILF
841S02BGIT 841S02BGILFT

Date Effective: **May 1, 2011**

MEANS OF DISTINGUISHING CHANGED DEVICES:

- Product Mark ICS841S02CIL
- Back Mark
- Date Code
- Other Ship Date

Contact: Peter Jenkins

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Attachment: Yes No

Samples: Available now

DESCRIPTION AND PURPOSE OF CHANGE:

- Die Technology
- Wafer Fabrication Process
- Assembly Process
- Equipment
- Material
- Testing
- Manufacturing Site
- Data Sheet
- Other * Die revision

This notification is to advise our customers that IDT has made a die revision on device 841S02BGI. The die change will improve the production yield and reduce the overall power consumption of the device. The datasheet specifications will also be updated to reflect the changes. The orderable part number have also changed.

RELIABILITY/QUALIFICATION SUMMARY:

There is no expected change to the product quality or reliability performance.

CUSTOMER ACKNOWLEDGMENT OF RECEIPT:

IDT records indicate that you require written notification of this change. Please use the acknowledgement below or E-Mail to grant approval or request additional information. If IDT does not receive acknowledgement within 90 days of this notice it will be assumed that this change is acceptable.

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

Customer: _____

Approval for shipments prior to effective date.

Name/Date: _____

E-Mail Address: _____

Title: _____

Phone# /Fax# : _____

CUSTOMER COMMENTS:

IDT ACKNOWLEDGMENT OF RECEIPT:

RECD. BY: _____

DATE: _____



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PRODUCT/PROCESS CHANGE NOTICE (PCN)

ATTACHMENT I - PCN # : N1101-03

PCN Type: Product Line

Data Sheet Change: Yes

Details Of Change:

Changing orderable part number: From To

| | |
|--------------|--------------|
| 841S02BGI | 841S02CGI |
| 841S02BGIT | 841S02CGIT |
| 841S02BGILF | 841S02CGILF |
| 841S02BGILFT | 841S02CGILFT |

The die change will improve the production yield and reduce the overall power consumption of the device. The following tables reflect the updates on the 841S02CGI rev A of the datasheet.

Table 5A. POWER SUPPLY DC CHARACTERISTICS, $V_{DD_REF}=V_{DDA}=V_{DD_SRC}=3.3V\pm5\%$, $T_A = -40^\circ C$ TO $85^\circ C$

| | | | FROM | | | TO | | | |
|---------------|--------------------------------|-----------------|--------------------|---------|---------------|---------------|---------|----------|------|
| Sym | Parameter | Test Conditions | Min | Typical | Max | Min | Typical | Max | Unit |
| V_{DD_REF} | Core Supply Voltage | | 3.135 | 3.3 | 3.465 | 3.135 | 3.3 | 3.465 | V |
| V_{DDA} | Analog Supply Voltage | - | $V_{DD_REF}-0.25$ | 3.3 | V_{DD_REF} | $V_{DD}-0.22$ | 3.3 | V_{DD} | V |
| V_{DD_SRC} | Core/SRC Output Supply Voltage | - | 3.135 | 3.3 | 3.465 | - | - | - | V |
| I_{DD_REF} | Power Supply Current | - | - | - | 8 | - | - | 80 | mA |
| I_{DD_SRC} | Core/SRC Supply Current | - | - | - | 130 | - | - | - | mA |
| I_{DDA} | Analog Supply Current | - | - | - | 25 | - | - | 22 | mA |

Table 5B. LVCMOS/LVTTL DC CHARACTERISTICS, $V_{DD_REF}=V_{DDA}=V_{DD_SRC}=3.3V\pm5\%$, $T_A = -40^\circ C$ TO $85^\circ C$

| | | | FROM | | | TO | | | |
|-----------------|----------------------------|------------------------|------|---------|-----|-----|---------|-----|------|
| Sym | Parameter | Test Conditions | Min | Typical | Max | Min | Typical | Max | Unit |
| V_{IH_SMBUS} | Input High Voltage | | 2.2 | - | - | 2.2 | - | - | V |
| V_{IL_SMBUS} | Input Low Voltage | - | - | - | 1.0 | - | - | 1.0 | V |
| I_{IH} | Input High Current | $V_{DD}=V_{IN}=3.465V$ | - | - | 5 | - | - | 10 | uA |
| I_{OH} | Output Current | - | - | 14 | - | - | - | - | uA |
| I_{OZ} | High Impedance Lkg Current | - | -10 | - | 10 | - | - | - | uA |

Table 6. AC CHARACTERISTICS, $V_{DD_REF}=V_{DDA}=V_{DD_SRC}=3.3V\pm5\%$, $T_A = -40^\circ C$ TO $85^\circ C$

| | | | FROM | | | TO | | | |
|------------------|--------------------------|------------------------|------|---------|-----|-----|---------|-----|------|
| Sym | Parameter | Test Conditions | Min | Typical | Max | Min | Typical | Max | Unit |
| $t_{jit(per)}$ | Period Jitter, RMS | - | - | - | 3 | - | 2.42 | 3 | ps |
| t_R/t_F | SRCT/SRCC Rise/Fall | - | 175 | - | 700 | 150 | - | 700 | ps |
| $\Delta t_R/t_F$ | Rise/Fall Time Variation | $V_{DD}=V_{IN}=3.465V$ | - | - | 125 | - | - | 145 | ps |
| V_{HIGH} | Voltage High | - | 520 | - | 800 | 520 | - | 875 | mV |

Sample Availability:

Samples are now available for all affected devices.

Please contact your local IDT sales representative for your sample request.