12500 TI Boulevard, MS 8640, Dallas, Texas 75243

PCN# 20131007000
Datasheet update for TUSB8040A
Information Only

Date: 10/10/2013
To: Newark/Farnell PCN

Dear Customer:

This is an information-only announcement of a change to a device that is currently offered by Texas Instruments.

The changes discussed within this PCN are for your information only. Please see the attachment details for the planned implementation date.

This notification period is per TI's standard process. Any negotiated alternative change requirements will be provided via the customer's defined process. Customers with previously negotiated, special requirements will be handled separately. Any inquiries should be directed to your local Field Sales Representative.

For questions regarding this notice, contact your local Field Sales Representative or the PCN Manager (PCN_ww_admin_team@list.ti.com).

Sincerely,

PCN Team
SC Business Services
Phone: +1(214) 480-6037
Fax: +1(214) 480-6659

20131007000
Attachment: 1

Products Affected:

The devices listed on this page are a subset of the complete list of affected devices. According to our records, these are the devices that you have purchased within the past twenty-four (24) months. The corresponding customer part number is also listed, if available.

DEVICE	CUSTOMER PART NUMBER
TUSB8040ARKMT	null

Technical details of this Product Change follow on the next page(s).

PCN Number:	20131007000	PCN Date:	10/10/2013
Title:	TUSB8040A Data Sheet		
Customer Contact:	PCN Manager	Phone: +1(214) 480-6037	Dept: Quality Services

Change Type:		
☐ Assembly Site	☐ Assembly Process	☐ Assembly Materials
☐ Design	☒ Electrical Specification	☐ Mechanical Specification
☐ Test Site	☐ Packing/Shipping/Labeling	☐ Test Process
☐ Wafer Bump Site	☐ Wafer Bump Material	☐ Wafer Bump Process
☐ Wafer Fab Site	☐ Wafer Fab Materials	☐ Wafer Fab Process
	☐ Part number change	

PCN Details

Description of Change:

The product datasheet(s) is being update, to add feature and add VBUS max.

The following change history provides further details. These changes may be reviewed at the datasheet links provided

From (Page 5):

1 PRODUCT OVERVIEW

1.1 Features

- Supports On-Board and In-System EEPROM Programming Via the USB 2.0 Upstream Port
- Single Clock Input, 24-MHz Crystal or Oscillator

To (Page 5):

1 PRODUCT OVERVIEW

1.1 Features

- Supports On-Board and In-System EEPROM Programming Via the USB 2.0 Upstream Port
- Single Clock Input, 24-MHz Crystal or Oscillator
- No Special Driver Requirements; Works Seamlessly With Any Operating System With USB Stack Support

From (Page 9):

2.3 USB Upstream Signals

Table 2-3. USB Upstream Signals

USB_R1	PT	A50	Precision resistor reference. A 9.09-kΩ ±1% resistor should be connected between USB_R1 and USB_R1RTN.
USB_R1RTN	PT	B47	Precision resistor reference return
USB_VBUS	I	B44	USB upstream port power monitor. The VBUS detection requires a voltage divider. The signal USB_VBUS must be connected to VBUS through a 90.9-kΩ ±1% resistor, and to ground through a 10-kΩ ±1% resistor from the signal to ground.

To (Page 9):

2.3 USB Upstream Signals

Table 2-3. USB Upstream Signals

USB_R1	PT	A50	Precision resistor reference. A 9.09-kΩ ±1% resistor should be connected between USB_R1 and USB_R1RTN.
USB_R1RTN	PT	B47	Precision resistor reference return
USB_VBUS	I	B44	USB Upstream port power monitor. The USB_VBUS input is a 1.2-V I/O cell and requires a voltage divider to prevent damage to the input. The signal USB_VBUS must be connected to VBUS through a 90.9-kΩ ±1% resistor, and to signal ground through a 10-kΩ ±1% resistor. This allows the input to detect VBUS present from a minimum of 4 V and sustain a maximum VBUS voltage up to 10 V (applied to the voltage divider).

From (page 28):

6.1 Absolute Maximum Ratings(1)

over operating free-air temperature range (unless otherwise noted)

		VALUE	UNIT
V_{DD33}	Supply voltage	-0.3 to 3.8	V
V_{DD11}		-0.3 to 1.4	
T_{stg}	Storage temperature range	-65 to 150	°C

To (page 28):

6.1 Absolute Maximum Ratings(1)

over operating free-air temperature range (unless otherwise noted)

		VALUE	UNIT
V_{DD33}	Steady-state supply voltage	-0.3 to 3.8	V
V_{DD11}		-0.3 to 1.4	
V_{IO}	USB 2.0 DP/DM	-0.3 to VDD33 + 0.3 ≤ 3.8	V
	SuperSpeed USB TXP/M and RXP/M	-0.3 to VDD33 + 0.3 ≤ 3.8	
	XI/XO	-0.3 to 1.98	
	3.3-V Tolerant I/O	-0.3 to VDD33 + 0.3 ≤ 3.8	
V_{USB_VBUS}		-0.3 to 1.2	V
T_{stg}	Storage temperature range	-65 to 150	°C

From (page 28):

6.2 Recommended Operating Conditions

over operating free-air temperature range (unless otherwise noted)

		MIN	NOM	MAX	UNIT
V_{DD33}	Supply voltage	3	3.3	3.6	V
V_{DD11}(1)		0.99	1.100	1.26	
T_A	Operating free-air temperature range	0	25	70	°C
T_J	Operating junction temperature range	0	25	105	°C

To (page 28):

6.2 Recommended Operating Conditions

over operating free-air temperature range (unless otherwise noted)

		MIN	NOM	MAX	UNIT
V_{DD33}	Steady-state supply voltage	3	3.3	3.6	V
V_{DD11} (1)		0.99	1.1	1.26	
V_{IO}	USB 2.0 DP/DM	0		VDD33	V
	SuperSpeed USB TXP/M and RXP/M	0		VDD33	
	XI/XO	0		1.8	
	3.3-V Tolerant I/O	0		VDD33	
V_{USB_VBUS}		0		1.155	V
T_A	Operating free-air temperature range	0	25	70	°C
T_J	Operating junction temperature range	0	25	105	°C

The datasheet number will be changing.

Device Family	Change From:	Change To:
TUSB8040A	SLLSEA7E	**SLLSEA7F**

The updated datasheet(s) can be accessed by the following link(s):
http://www.ti.com/product/tusb8040a

Reason for Change:

To more accurately reflect device characteristics.

Anticipated impact on Fit, Form, Function, Quality or Reliability (positive / negative):

Electrical specification performance changes as indicated above.

Changes to product identification resulting from this PCN:

None

Product Affected:

TUSB8040ARKMR	TUSB8040ARKMT

For questions regarding this notice, e-mails can be sent to the regional contacts shown below or your local Field Sales Representative.

Location	E-Mail
USA	PCNAmericasContact@list.ti.com
Europe	PCNEuropeContact@list.ti.com
Asia Pacific	PCNAsiaContact@list.ti.com
Japan	PCNJapanContact@list.ti.com