

PCN Number:	20150619000	PCN Date:	06/23/2015
Title:	Datasheet update for PGA450-Q1		
Customer Contact:	PCN Manager	Dept:	Quality Services
Change Type:			
☐ Assembly Site	☐ Design	☐ Wafer Bump Site	
☐ Assembly Process	☒ Data Sheet	☐ Wafer Bump Material	
☐ Assembly Materials	☐ Part number change	☐ Wafer Bump Process	
☐ Mechanical Specification	☐ Test Site	☐ Wafer Fab Site	
☐ Packing/Shipping/Labeling	☐ Test Process	☐ Wafer Fab Materials	
		☐ Wafer Fab Process	

PCN Details

Description of Change:

Texas Instruments Incorporated is announcing an information only notification.

The product datasheet(s) is updated as seen in the change revision history below:



PGA450-Q1

SLDS185B – APRIL 2012 – REVISED JUNE 2015

www.ti.com

Changes from Revision A (April 2012) to Revision B

Page

• Changed <i>Automotive Park Distance</i> to <i>Automotive Park Assist</i> in the <i>Applications and Description</i> sections	1
• Added <i>ESD Ratings</i> table, <i>Feature Description</i> section, <i>Device Functional Modes</i> , <i>Application and Implementation</i> section, <i>Power Supply Recommendations</i> section, <i>Layout</i> section, <i>Device and Documentation Support</i> section, and <i>Mechanical, Packaging, and Orderable Information</i> section.	1
• Added the external crystal parameter to the <i>Timing Requirements</i> table	8
• Changed active bit to <i>ACTIVE_EN</i> bit and added <i>VREG_EN</i> ; updated <i>Power-Up Waveforms</i> figure in the <i>Power Supply Block</i> section.	16
• Removed ; this field can be updated by the 8051W from the last paragraph in the <i>Clock Synchronizer Using the SYNC Field</i> in the <i>LIN Bus</i> section.....	18
• Updated the <i>Burst Generator</i> figure	20
• Changed all instances of <i>LS</i> in to <i>Low-side</i> in <i>Description</i> column of <i>Low-Side MOSFET Gate Drive Modes ITEM DESCRIPTION</i> table	20
• Changed register names in the description column of the <i>Low-Side MOSFET Gate Drive Modes ITEM DESCRIPTION</i> table: <i>ENABLE CONTROL</i> to <i>EN_CTRL</i> , <i>PULSE COUNT A</i> to <i>PULSE_CNTA</i> , <i>PULSE COUNT B</i> to <i>PULSE_CNTB</i> , <i>BURST_ONA</i> to <i>ON_A</i> , <i>BURST_OFFA</i> to <i>OFF_A</i> , <i>BURST_ONB</i> to <i>ON_B</i> , <i>BURST_OFFB</i> to <i>OFF_B</i> . Removed <i>Set by SFR</i> from <i>Description</i>	20
• Changed <i>For TI Use Only</i> to <i>Reserved</i>	21
• Updated the <i>Digital Data Path</i> figure	23
• Changed <i>MODE</i> bits to <i>mode</i> bits, changed <i>FIFO CONTROL</i> register to <i>FIFO control</i> register and added (<i>FIFO_CTRL</i>) to <i>Datapath Output Format Control</i> section.....	35
• Added (<i>EN_CTRL</i>) and changed <i>ENABLE CONTROL</i> register to <i>enable control</i> register in the <i>Datapath Activation and Blanking Timer</i>	36
• Updated the <i>States of Digital Datapath</i> figure	37
• Changed <i>ANALOG MUX ESFR</i> to <i>ANALOG_MUX ESFR</i> , removed all caps for temperature sensor and digital	

datapath, changed TEMP_CTRL to TEMP_DAC_CTRL in the Digital Datapath Output Mode section.	37
• Added (EN_CTRL), (SAT_DEGLITCH), and (SAT_TIME) register name definitions, changed uppercase register names to lower case, changed second bullet from: SATURATION THRESHOLD register to: Saturation threshold is set by the SAT_SEL1 and SAT_SEL0 bits in CONTROL_1 register in <i>Transducer Saturation Time</i> section.	37
• Updated the <i>Transducer Saturation-Time Measurement Block</i> figure	37
• Changed ENABLE CONTROL register to EN_CTRL, changed SATURATION DEGLITCH TIME register to SAT_DEGLITCH register, changed SATURATION TIME CAPTURE register to SAT_TIME register, changed sentence from: When this voltage goes below the programmed threshold in the SATURATION THRESHOLD register... to: When this voltage goes below the programmed saturation threshold... ..	38
• Changed room temperature to 30°C; changed Temperature = 0.75 to Temperature = 1.75 in <i>Temperature Sensor</i> section.	39
• Updated the <i>Timing Diagram Showing the Measurement of Transducer Saturation Time</i> figure.....	39
• Changed FREE RUNNING TIMER to free-running timer, added (FRT) coin, changed register to ESFR, changed CAP_FR_TMR to CAP_FR_TIMER.	40
• Added: which is stored in the FIFO_POINTER register to FIFO Memory for <i>Digital Datapath Output</i> section.	41
• Deleted <i>unless the entire OTP is erased by a UV-light EPROM eraser</i> from the following sentence: <i>After an address is programmed, it cannot be programmed again.</i> in the <i>OTP Programming</i> section.	43
• Removed: Use MOVX commands to place data in external memory addresses 0x0400 through 0x041F.	45
• Updated the <i>LIN Registers</i> figure	47
• Switched 1 and 0 under HOLD in <i>LIN Frame-Control Configuration</i> section.	48
• Changed If there is a parity error... to: If there is no parity error... in <i>LIN Slave-Protocol State Machine</i>	49
• Updated the <i>LIN Controller State Machine</i> figure.....	51
• Changed Rx to receive in <i>LIN Slave Protocol Rx</i> section.	51
• Changed receive to transmit and TX to transmit in the <i>LIN Slave Protocol Tx</i> section.	51
• Removed: of the PID field under STOP_BIT_VAL in the <i>LIN Slave Framing Error Status</i> section.	51
• Changed CPU_WD_EN to SW_WD_EN.....	62

The datasheet number will be changing.

Device Family	Change From:	Change To:
PGA450-Q1	SLDS185A	SLDS185B

These changes may be reviewed at the datasheet links provided.

<http://www.ti.com/product/pga450-q1>

Reason for Change:

To more accurately reflect device characteristics.

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

No anticipated impact. This is a specification change announcement only. There are no changes to the actual device.

Changes to product identification resulting from this PCN:

None.

Product Affected:

PGA450IPWRQ1	PGA450TPWRQ1
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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
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