

**PRODUCT CHANGE NOTICE**

Date Submitted: 27-Feb-19  
 Model No.: DS1100PED-3-001  
 Product Description: 1100W Switching Power Supply  
 Customer P/N: STANDARD  
 Manufacturing Location(s) Affected: Philippines  
 Reason(s) for Change:  
 LED Behavior during SOFT INHIBIT through PMBUS command

Customer Info:  
 Contact: Richard Caubang  
 Title: Manager Senior Technical Product  
 Tel. No.:  
 Fax No.:  
 E-mail Address: richarddaniel.caubang@artesy.com

EXPECTED: PMBus GUI Operation Reg (01h) set to 0x40 => LED: Blinking Amber (Main Vout goes low)  
 ACTUAL: PMBus GUI Operation Reg (01h) set to 0x40 => LED: Solid Green (Main Vout goes low)

Description of Change(s):  
 FIRMWARE: Update FW from 630-002293-0002 to 630-002293-0003 (ver 01.04.00 to 01.05.00)

OPERATION: PMBus GUI Operation Reg (01h) set to 0x40 => Blinking Amber (Main Vout goes low)  
 VERSION: PMBus GUI Operation Reg (E1h) => 01.04.00 to 01.05.00 (ASCII)  
 See Page 3 for FW Improvement Changes

**Affected Area**

- Electrical
  - Components
    - Functional Tests
  - EEPROM
    - EEPROM Verification
- Mechanical
  - Metal Parts
  - Plastic Parts
  - Labels
  - Insulators
  - Others:
- Software
- Firmware
- Plug-In
- Others

**Impact of Change**

- Form
- Fit
- Function
- Quality/Reliability
- Safety
- Tooling Cost:                      Est. Tooling Cost
- Schedule:
- No Impact to Above Items

**Revision Changes**

- Model Revision
- Customer P/N
- Customer P/N Revision
- EEPROM
- Repair – FRU
- CLEI Code
- ECI Code
- Others:

Comments:  
 Revision Change from AK -> AL as requested by FAE

**Change Applicable to:**

- Vendor - Change will be implemented on all parts that are still with vendor, either in-process or pending delivery. This type of change will affect POs that are pending receipt from vendor.
- Warehouse - Change will be implemented on parts that are in receiving, already in stock or are pending issuance to Production by Warehouse.
- Work-in-Process (WIP) - Change will be implemented on parts that are already issued to the assembly line, ongoing assembly or awaiting assembly, ongoing testing or awaiting testing.
- Finished Goods (FG) Change will be implemented on Finished Goods awaiting shipment to the customer.
- Customer Inventory - Change will be implemented on all units in transit to customer, received at customer, in customer warehouse or customer WIP. This applies only to units are still untouched by customer and in original condition "as-shipped" by Artesyn. *BRMA is required*
- Field Units - Change will be implemented on all units physically integrated into customer products at customer FG, in HUBs or in transit to end-customer, at end- customer location or installed/operating in field application. *BRMA and customer field retrofit program is required*
- Returns for Repair - Change will be implemented on warranty returns from customer
- Not Applicable

**Attachments**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Qualification Results | <input type="checkbox"/> PCB Layout        | <input type="checkbox"/> Deviation List       |
| <input type="checkbox"/> BOM                   | <input type="checkbox"/> Source List / AVL | <input type="checkbox"/> Process Instructions |
| <input type="checkbox"/> Circuit Diagram       | <input type="checkbox"/> Component Specs   | <input type="checkbox"/> Others:              |
| <input type="checkbox"/> Customer Approval     |  |   |

Requested by :Jofel Esleta  
Reviewed by : Kenneth Enrie



Date: 27-Feb-18  
Date: 27-Feb-18

**IMPLEMENTATION DETAILS**

Date: TBA                                  Serial No.:                                  ECO No.: 8140414  
Comments:

**TO BE FILLED IN BY THE CUSTOMER**

- |   |                 |          |
|---|-----------------|----------|
| <input type="checkbox"/> Approved                               | Name:           |          |
| <input type="checkbox"/> Disapproved                            | Signature:      |          |
| <input type="checkbox"/> No action required (Notification only) | Title:          |          |
|   | Company:        |          |
|   | E-mail Address: |          |
|   | Tel. No.:       | Fax No.: |
|   | Date:           |          |

Reason(s) for rejection or qualifying conditions for acceptance:

**FW Improvement List Of Changes:**

- 1) New Feature: Implement Standard Low Voltage Interrupt Requirements (Lessons Learned to prevent data corruption)
- 2) Fix: Implement Standard Data Type on Query (Affects QUERY register – 0x1A reads only)  
This affects bits 4:2 of the QUERY response.

Table 8. QUERY Command Returned Data Byte Format

Bits	Value	Meaning
7	1	Command is supported
	0	Command is not supported
6	1	Command is supported for write
	0	Command is not supported for write
5	1	Command is supported for read
	0	Command is not supported for read
4:2	000	Linear Data Format used
	001	16 bit signed number
	010	Reserved
	011	Direct Mode Format used
	100	8 bit unsigned number
	101	VID Mode Format used
	110	Manufacturer specific format used
111	Command does not return numeric data. This is also used for commands that return blocks of data.	
1:0	XX	Reserved for future use

Sample reads:

QUERY Read Command	Description	V01.04.00 SEC FW	V01.05.00 SEC FW
A1,01,10	Returns data byte format for WRITE_PROTECT (R/W)	0xEC (111 <b>01</b> 100b)	0xFC (111 <b>111</b> 00b)
A1,01,78	Returns data byte format for STATUS_BYTE (R only)	0xAC (101 <b>01</b> 100b)	0xBC (101 <b>111</b> 00b)
A1,01,99	Returns data byte format for MFR_ID (R only)	0xBC (101 <b>11</b> 100b)	0xB8 (101 <b>110</b> 00b)

Use corrected/standard query data format. Avoid using DIRECT data format for the following registers below:

- a. 0x00
- b. 0x01
- c. 0x10
- d. 0x19
- e. 0x20
- f. 0x3A
- g. 0x41
- h. 0x45
- i. 0x47
- j. 0x50
- k. 0x56
- l. 0x5A
- m. 0x63
- n. 0x78 - 0x81
- o. 0x99
- p. 0x9A
- q. 0xB0
- r. 0xE1
- s. 0xE7
- t. 0xE8
- u. 0xF1
- v. 0xF3
- w. 0xF4
- x. 0xF5

- 3) Fix: Update VIN UV reporting PMBUS to latching bits. Status Byte response from 40h to 48h, with VIN UV bit3 flag asserted.
- 4) Fix: E2h and F1h should return 4 byte count

QUERY Read Command	Description	V01.04.00 SEC FW	V01.05.00 SEC FW
E2h	Returns data for CONFIG_UNLOCK_CODE	00,00,00,00,00	04,00,00,00,00
F1h	Returns data for ISP_UNLOCK_CODE	00,00,00,00,00	04,00,00,00,00