Purpose: This Product Change Notification (PCN) is to provide notification to PHYTEC customers of component, process or other relevant engineering changes on a PHYTEC hardware subassembly. Impact, qualification, validation and approval of this change shall be documented on the corresponding Customer-Specific Modification (KSM/KSP) form for the PHYTEC hardware subassembly

Product affected / Release Date	
Notice Date: **November 26, 2015**	LPN #: **LPN-086e_8**
Date of Change: January 2015	New Product Version: **Ax**
PHYTEC Subassembly:	**All products with Spansion AM29F010 Flash**
PHYTEC Subassembly Part #: All products with Spansion AM29F010 Flash	
New PHYTEC Part #: new Version with Ax	

Discontinued Ordering Codes and Replacement Information for Standard-Options

Current part number	New part number
MM-003-CC	MM-003-CC.A1
MM-003-2CC	MM-003-2CC.A1
MM-003-CCI	On demand
MM-003-CCQG-XI	On demand
MM-003-0CCQ6-X	MM-003-0CCQ6-X.A1
MM-003-2CCQ6-X	On demand
MM-203-CDQ22	On demand
MM-203-CD	On demand
MM-203-3CD	On demand
MM-207-CA05Q20I	On demand
MM-311	MM-311.A1
MM-311-I	MM-311-I.A1
MM-311-520	MM-311-520.A1
MM-311-CSI	MM-311-CSI.A1
MM-311-A	MM-311-A.A1
MM-311-020A	MM-311-020A.A1

Engineering Change (Component, Firmware, Process, other)		
Current Part		**New Part**
IM642	**PHYTEC Internal Part #**	IM775 H601220
Spansion	**Manufacturer**	AMIC
AM29F010B-45JF	**Manufacturer Part #**	A29010AL-55UF
128 kBit Uniform Boot Sector Flash, 45ns	**Description**	128 kBit Uniform Boot Sector Flash, 55ns
IM096	**PHYTEC Internal Part #**	
Spansion	**Manufacturer**	
AM29F010B-55JF	**Manufacturer Part #**	
128 kBit Uniform Boot Sector Flash, 55ns	**Description**	
IM088	**PHYTEC Internal Part #**	
Spansion	**Manufacturer**	
AM29F010B-70JF	**Manufacturer Part #**	
128 kBit Uniform Boot Sector Flash, 70ns	**Description**	

Engineering Change Details

Reason for Component Change:
Obsolescence of Flash Memory Products Manufactured

Referenced Component Documents:
Spansion Obsolescence Notification 2850, 06/08/2012

Impact of Change

(1) No Impact in fit and form
(2) Different Manufacture and Device ID's
(3) Different Block Sector Address Table

Measures taken by PHYTEC

(1) Datasheet Comparison
(2) Release IM775 in the climatic chamber
(3)

Recommended Measures for Customer

(1) Add additional FlashInfo Files for FlashTool3 (16 bit Controller)
FT3_V17_Update2 or newer
ftp://ftp.phytec.de/pub/TOOLS/FlashTools/Flashtools3
(2) Updated Flashtool 98 (8 bit Controller) in Version V1.2.3.0 or newer
ftp://ftp.phytec.de/pub/TOOLS/FlashTools/FlashTools98/Win2000_XP/
(3) Check Manufacture and Device ID request routine, because with the AMIC Flash you have to keep up with the orders exactly to the datasheet. Examples on request by Phytec support.
(4) Negative effects can may occur due to unstable voltage, delayed reset and load on the Address-\Databus
(5) If AM29F010B-45 was in use, then additional Waitstates may be neccessary

Technical Differences

Parameter	Original **AM29F010B-x**	Replacement **A29010AL-55UF**	**Assess-ment**[1]
Manufacturer ID	0x01	0x37	1
Device ID	0x20	0xA4	1
Program/Erase Cycles (per Block)	Min 1 Million	Min 100.000	4
Read\Write Cycle Time t_{RC}\ t_{WC}	AM29F010B-45: 45 ns AM29F010B-55: 55 ns AM29F010B-70: 70 ns	55 ns	1
Block Sector Address Table	8 Sectors with per 16 kBytes	4 Sectors with per 32 kBytes	1

[1] Assessments:
1: Effects are to be expected
2: No negative effects are to be expected
3: Better than before
4: Worse than before

Technical Similarities		
Parameter	Original **AM29F010B-x**	Replacement **A29010AL-55UF**
Supply Voltage	VCC: 4,5 to 5,5 V	
Temperature	-40 to +85 °C	
Package Pitch, Form	32-Pin Plastic Leaded Chip Carrier, 14,99 x 12,45 mm, 1,27mm Pitch	
Device Command Set	compatible	
JEDEC standard	Pinout and software compatible with single-powersupply Flash memory standard	
Data Retention	20 years at 125 °C	

Note:
Technical differences and similarities in the tables above may not be complete. Please refer to the manufacture datasheets for a complete comparison.

Please contact our support if you need any further information.

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