

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 6, 2013	LPN #: LPN-111e_1
Date of Change: Q4 2013	New Product Version: PCA-A-S1-2101000.A1
PHYTEC Subassembly:	phyCARD-S i.MX27
PHYTEC Subassembly Part #: PCA-A-S1-1100000, PCA-A-S1-1100000.A1, PCA-A-S1-1001000, PCA-A-S1-1000000, PCA-A-S1-1000001, PCA-A-S1-KSM\KSP with 64 MByte RAM (2 x 32 MByte)	
New PHYTEC Part #: PCA-A-S1 with 128MByte RAM e.g. PCA-A-S1-2101000.A1 ,	

Engineering Change (Component, Firmware, Process, other)		
Current Part		New Part
IM517	PHYTEC Internal Part #	IM467
Micron	Manufacturer	Micron
MT46H16M16LFBF-6IT:H	Manufacturer Part #	MT46H32M16LFBF-6IT:C
32 MByte DDR SDRam	Description	64 MByte DDR SDRam

Engineering Change Details
<p>Reason for Component Change: DDR: Mobile SDR family Y36N, and DDR T36N products will be discontinued. Optimization of Manufacturing Efficiency</p>
<p>Referenced Component Documents: Micron PCN 30902, 01.05.2013</p>

Impact of Change

- (1) DDR: same form, fit and function
- (2) **Different Memory Size**

Measures taken by PHYTEC

- (1) Datasheet Check
- (2) Release of PCA-A-S1-2101000 as supplement

Recommended Measures for Customer

- (1) Order PCA-A-S1-2101000 with 128MB Ram
- (2) Consider new Bootloader version

Technical Differences

Parameter	Original MT46H16M16LFBF-6IT:H	Replacement MT46H32M16LFBF-6IT:C	Assess- ment ¹
Configuration	16 Meg x 16 (4 Meg x 16 x 4 banks)	32 Meg x 16 (8 Meg x 16 x 4 banks)	1

Technical Similarities

Parameter	Original MT46H16M16LFBF-6IT:H	Replacement MT46H32M16LFBF-6IT:C
Supply Voltage	V _{DD} , V _{DDQ} =1.7 V to 1.95 V	
Package Pitch, Form	VFBGA Package 60 balls; 8mm x 9mm, 0.8 mm ball Pitch;	
Clock Rate	CL=2: 83.3 MHZ, CL=3: 166 MHZ	
Temperature	-40 °C to +85 °C	

Note:

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

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

Please contact our support if you need any further information.

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