Raspberry Pi Product Change Notification

RPI-PCN-CM-001

Notification date:
7th April 2017

Title:
Change of eMMC Flash and LPDDR2 memory parts.

Product Identification:
Raspberry Pi Compute Module V1.1 (Made in PRC and Made in UK versions).

Reason for Change:
EOL of KLM4G1FEAC-B031 (Samsung 4GByte eMMC Flash).
EOL of K4P4G324EQ-RGC2 (Samsung 4Gbit LPDDR2 Memory).

Change Description:
The current eMMC and LPDDR2 parts are end of life (EOL).

Raspberry Pi have extensively tested and qualified alternatives which closely match the original parts in terms of specification and performance:

<table>
<thead>
<tr>
<th>Part Description and Ref</th>
<th>Original Part</th>
<th>New Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>4GByte eMMC (U2)</td>
<td>Samsung KLM4G1FEAC-B031</td>
<td>Samsung KLM4G1FEPD-B031</td>
</tr>
<tr>
<td>4GBit LPDDR2 (U1A)</td>
<td>Samsung K4P4G324EQ-RGC2</td>
<td>Micron EDB4432BBPA-1D-F-R</td>
</tr>
</tbody>
</table>

Mechanical (Form, Fit, Function) Changes:
None.

Firmware Changes Required:
Firmware older than November 2015 should be updated.
Older firmware may still work but not set up the LPDDR2 memory optimally.
Very old firmware may not boot on the device.

Transition Date(s):
New manufacturing runs from April 2017 in both China and UK factories will produce product with both new parts.
There will be a transition period where both old and new units are available in the distribution channel.
Identification Method to Distinguish Change:

New product can be distinguished by the markings on the eMMC device (U2) and LPDDR2 memory device (U1).

<table>
<thead>
<tr>
<th>Reference</th>
<th>Original Part</th>
<th>New Part</th>
</tr>
</thead>
<tbody>
<tr>
<td>U2</td>
<td><img src="image1.png" alt="Original U2" /></td>
<td><img src="image2.png" alt="New U2" /></td>
</tr>
<tr>
<td>U1</td>
<td><img src="image3.png" alt="Original U1" /></td>
<td><img src="image4.png" alt="New U1" /></td>
</tr>
</tbody>
</table>