

11. PCN 634: Hardware & Software Changes

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PCN Classification:

- A - Recall
- B - Customer Action Required
- C - Product Upgrade
- D - Change of Production Line

11.1 Products Affected

This PCN describes hardware changes made to the DM3730/AM3703 Torpedo + Wireless SOM. The "New Model Number & Rev" listed below indicates the first SOMs that will be manufactured with the changes described herein. Note that the model numbers did not change with this update – only the revision of the assembly part numbers.

Note: This section has been updated to add affected and new model SOMDM3730-32-2880AKXR-B

Affected Model Number & Rev (Part Number)	New Model Number & Rev (Part Number)
SOMDM3730-32-2780AKCR-A (1027263 rev B)	SOMDM3730-32-2780AKCR-A (1027263 rev C)
SOMAM3703-32-1780AKIR-A (1027255 rev B)	SOMAM3703-32-1780AKIR-A (1027255 rev C)
SOMDM3730-32-2880AKXR-B (1027810 rev B)	SOMDM3730-32-2880AKXR-B (1027810 rev C)

11.2 Description of Change

11.2.1 Hardware Change

The Epson oscillator TG-5035CJ-18S 26MHz used in reference designator locations Y4 and Y5 has gone to obsolete status. The new revisions of these assemblies will replace this obsolete component with two new oscillator components – depending on the reference designator location.

In location Y4, the new component will be Epson TG2016SMN 26.0000M-ECGNM. R163 connected to Y4 has been removed as part of this change.

In location Y5, the new component will be Abracon AMPMAFB-26.0000T (note: equivalent alternates are being tested for this location). Capacitor C206 connected to Y5 has been changed to a 22 ohm resistor.

Qualification testing has been completed to validate these new components. If further information on the qualification testing and results is desired, please contact Beacon EmbeddedWorks via the contact information provided below.



11.2.2 Software Change

Note: This section has been updated to indicate that ISED testing is complete.

As part of the qualification of the new oscillator the SOM has been fully tested for 802.11a/b/g/n wireless Ethernet and Bluetooth compliance with FCC and ISED rules for modular certification. This testing has resulted in a Class II Permissive Change grant under the same FCC ID and ISED Certification Number.

During this testing, a few radio parameters were updated due to use of a different SOM and antenna configuration (physical placement relative to the SOM+Baseboard setup, same antenna part numbers). Customers should update their NVS and BTS files for the wireless drivers using the files located within the updated [AN 538 FCC/IC Certification Guidelines for End Products Using the DM3730/AM3703 Torpedo + Wireless SOM Application Note Revision D](#)²⁰. Since this update is related to a different SOM and antenna configuration and not specifically to the oscillator change, a rolling change to customer software is recommended across all -32 SOM products; the changes are backwards compatible.

Please refer to [AN 538 FCC/IC Certification Guidelines for End Products Using the DM3730/AM3703 Torpedo + Wireless SOM](#)²¹ for additional information about regulation compliance.

11.3 Contact

For additional information, please post a question to the Beacon EmbeddedWorks [Technical Discussion Group \(TDG\) forum](#).²²

²⁰ <https://support.beaconembedded.com/DesktopModules/Bring2mind/DMX/Download.aspx?portalid=0&EntryId=643>

²¹ <http://support.beaconembedded.com/DesktopModules/Bring2mind/DMX/Download.aspx?portalid=0&EntryId=643>

²² <http://support.beaconembedded.com/TDGForum.aspx>

