



August 11, 2016

## Notification: LTP5900/1/2 Printed Circuit Board (PCB) Products

Thank you for your interest in SmartMesh LTP5900/1/2 Pre-Programmed PCB parts from Linear Technology. In order to provide the best possible order lead times and simplify part ordering for all customers, Linear Technology sales channels/distributors will stock only the non-programmed versions of the SmartMesh PCB products, such as LTP5901IPC-IPMA#PBF, LTP5902IPC-IPMA#PBF, effective immediately.

With SmartMesh non-programmed PCB products, the software executables are delivered electronically to registered users via <https://www.linear.com/mylinear/>. Customers (or their contract manufacturers) can load their software onto their PCB products through a programmer<sup>1</sup>. By including the ability to load software via programmer, customers can maintain their products with the latest SmartMesh wireless networking software updates and their latest application software<sup>2</sup>.

Please note that **existing pre-programmed part numbers (e.g. LTP5901IPC-IPMA1D1#PBF) are still orderable** from Linear Technology, both directly and through Linear Technology distributors, but may experience longer than standard lead times.

**Table 1 Non-programmed Part Numbers**

Part Number	Description	Used for the following programmed parts:
<b>SmartMesh IP non-programmed part numbers</b> (May be loaded with either Mote or Manager software)		
LTP5901IPC-IPMA#PBF	SmartMesh IP Module, Eterna (castellated PCBA, chip antenna), no SW loaded	LTP5901IPC-IPMA1D0#PBF, LTP5901IPC-IPMA1D1#PBF, LTP5901IPC-IPRA1C1#PBF, LTP5901IPC-IPRA1C2#PBF, LTP5901IPC-IPRB1C1#PBF, LTP5901IPC-IPRB1C2#PBF, LTP5901IPC-IPRC1C1#PBF, LTP5901IPC-IPRC1C2#PBF
LTP5902IPC-IPMA#PBF	SmartMesh IP Module, Eterna (castellated PCBA, MMCX antenna connector), no SW loaded	LTP5902IPC-IPMA1D0#PBF, LTP5902IPC-IPMA1D1#PBF, LTP5902IPC-IPRA1C1#PBF, LTP5902IPC-IPRA1C2#PBF, LTP5902IPC-IPRB1C1#PBF, LTP5902IPC-IPRB1C2#PBF, LTP5902IPC-IPRC1C1#PBF, LTP5902IPC-IPRC1C2#PBF
<b>SmartMesh WirelessHART non-programmed part numbers</b>		
LTP5900IPC-WHMA#PBF	SmartMesh WirelessHART Mote Module, Eterna (22-pin PCBA, MMCX antenna connector), no SW loaded	LTP5900IPC-WHMA1A2#PBF, LTP5900IPC-WHMA1B2#PBF
LTP5901IPC-WHMA#PBF	SmartMesh WirelessHART Mote Module, Eterna (castellated PCBA, chip antenna), no SW loaded	LTP5901IPC-WHMA1A2#PBF, LTP5901IPC-WHMA1B2#PBF
LTP5902IPC-WHMA#PBF	SmartMesh WirelessHART Mote Module, Eterna (castellated PCBA, MMCX antenna connector), no SW loaded	LTP5902IPC-WHMA1A2#PBF, LTP5902IPC-WHMA1B2#PBF

<sup>1</sup> For an overview of the software download and programming, please see the “Software Installation” section of the LTP5901/2-IPM datasheet, <http://www.linear.com/docs/41871>.

<sup>2</sup> With the SmartMesh IP On-Chip SDK ([www.linear.com/onchipsdk](http://www.linear.com/onchipsdk)), customers may develop and load their own application software onto the ARM Cortex-M3 on-board SmartMesh IP motes. Customer code and SmartMesh network software can be linked into a single binary image.

## FAQ:

**1. How can I tell if my part number is a pre-programmed part number?**

Pre-programmed PCB parts have a three-digit software code at the end of the part number, for example: LTP5901IPC-IPMA1D1#PBF (where "1D1" signifies software revision 1.3.1)

**2. I buy a pre-programmed LTP590x part number today. I did not include a programming header in my design. Does this mean I have to re-design my PC board to be able to program?**

Existing pre-programmed part numbers are still available to order, but may have longer lead times than non-programmed boards.

**3. Why are there no new "-IPR" unprogrammed part numbers?**

An unprogrammed "-IPM" device can operate as either a SmartMesh IP Mote or Manager, as determined by the software programmed. That is, going forward, customers can use LTC5800-IPM, LTP5901-IPM, or LTP5902-IPM hardware to run either SmartMesh IP mote or manager software.

**4. Are LTC5800 (QFN-package chip parts) affected by this announcement?**

No, LTC5800 products have only been offered by Linear Technology as non-programmed and will continue to be offered as such.