

# **PRODUCT BRIEF**

# **Pigeon Point ShMM-700R Starter Kit**Shelf Management Starter Kit

For AdvancedTCA and Custom Derivative Architectures

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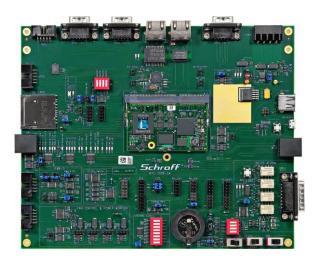


This Pigeon Point Shelf Management Starter Kit provides everything you need to quickly and cost-effectively develop compliant and interoperable Shelf Management Controllers for AdvancedTCA or custom shelves. The kit includes:

- Schematics for a ShMM-700R carrier board, ready for adaptation to the needs of your shelf
- Bench top hardware, including a Shelf Manager and IPM Controller (IPMC), allowing your ramp up on AdvancedTCA style management to start immediately.
- One-stop support for hardware, firmware and software used in developing and delivering your Pigeon Point ShMM-700R based AdvancedTCA Shelf Manager.

(The term "shelf," as used in AdvancedTCA and some industries, is essentially equivalent to the widely used term "chassis.")

Please see the separate *Pigeon Point ShMM-700R* and *Shelf Manager Product Brief* for more details on the core components in this Starter Kit that are summarized below.



## **Bench top Shelf Manager**

- Pigeon Point ShMM-700R Shelf Management Mezzanine with Pigeon Point Shelf Manager
- BTC-700R Bench Top Carrier provides a socket for the ShMM-700R and on-carrier resources similar to an actual in-shelf ShMM-700R carrier
- BTC-700R can be cabled together with the included bench top IPMC to form a twonode bench top IPMI network

# Software, schematics & documentation delivered via secure website

- An overall partner page lists the individual product pages for the Pigeon Point products licensed by your company, accessed via company-specific credentials
- Product pages enable instant access to any updated materials that become available for a given product; an example Shelf Manager Release Page is shown on the next page of this brief.
- Pigeon Point ShMM-700R supports reliable, remote firmware upgrade over an Ethernet connection for all ShMM-700R-resident firmware
- Pigeon Point ShMM-700R and Shelf Manager Product Brief provides more details on ShMM-700R firmware upgrade facilities



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#### Pigeon Point Shelf Manager Release Page

Export	Control	Classification	Number
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export.README Additional Export Information

## Upgrade Images and Instructions

ShMM-700R Images

Upgrade instructions for ShMM-700R

#### **Documentation**

ShelfManagerREL.pdf ShelfManagerUG.pdf ShelfManagerEIR.pdf Pigeon Point Shelf Manager Release Notes Pigeon Point Shelf Manager User Guide Pigeon Point Shelf Manager External Interface

Reference

# Utilities

SDR/FRU Compilers RMCPTA Utility HPDL Compiler Python based FRU/SDR compilers RMCPTA – RMCP Test Agent HPDL - Compiler

HPDL - Comp

#### IntegralHPI IntegralHPI

IHPI IntegralHPI

# PPMM-700R carrier reference design schematics and bill of materials<sup>1</sup>

 PPMM-700R carrier reference design schematics provided in PDF form

<sup>&</sup>lt;sup>1</sup> The ShMM-700R is based on a hardware platform called the Pigeon Point Management Mezzanine 700R (PPMM-700R). That platform can also be configured for VITA's VPX, where nVent offers a complementary Pigeon Point Chassis Manager, running on the ChMM-700R. Separate product briefs cover that product.



- In addition to supporting a bused IPMB-0 topology the PPMM-700R carrier reference design also includes the needed hardware design materials for customers to implement a radial IPMB-0 topology, using one or more Microsemi SmartFusion FPGA(s) on the PPMM-700R carrier.
- Bill of materials includes materials for both the core carrier reference design and additional parts used on the bench top reference implementation



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## BTC-700R Resource Page

## **Carrier Design Materials**

ppmm700r-btc-ts-2\_0\_0.pdf ppmm-700r-carrier-rd-hwdesign-3\_2.zip BTC-700R Technical Specification
PPMM-700R Carrier hardware reference
design files, includes schematics (pdf and
OrCAD design database) and Bill Of
Materials.

Radial IPMB SmartFusion FPGA Images									artFusion FPGA Images
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radial\_ipmb\_fpga-1\_3-1\_0\_1\_0.dat SmartFusion FPGA data file radial\_ipmb\_fpga-1\_3-1\_0\_1\_0.pdb SmartFusion FPGA Program Database File

# **Technical specifications**

- Pigeon Point Management Mezzanine (PPMM-700R) Hardware Architecture Technical Specification
- Pigeon Point Management Mezzanine (PPMM-700R) Bench Top Carrier Technical Specification

# **Pigeon Point Linux for ShMM-700R**

- Special Pigeon Point distribution optimized for cross development of ShMM-hosted applications, especially the Shelf Manager
- Key features for Shelf Manager application include:
  - o Based on Linux 2.6.34 kernel port
  - Specific support for Freescale i.MX287 processor and its peripherals, as well as the auxiliary Microsemi SmartFusion FPGA

# **Bench top IPMC**

One board supplied; can be cabled together with the bench top Pigeon Point Shelf Manager (see above) to form a two-node bench top IPMI management network.



# **Ordering Information:**

ShMM-700R-ATCA-SK Part #: 21991-130	Shelf Management Starter Kit for ATCA shelves or custom chassis
BTC-700R-GbE-ATCA Part #: 21991-846	Bench top carrier board. Includes ShMM-700R module and power supply.