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PRODUCT BRIEF

Pigeon Point BMR-ZNQ-VPX-SK Starter Kit

Board Management Starter Kit

Board Management Starter Kit Add-on

For VPX and ANSI/VITA 46.11-2022

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This Pigeon Point Board Management Starter Kit provides everything you need to quickly and cost-effectively add ANSI/VITA 46.11-2022 Tier-2 or Tier-1 IPM Controller functionality to designs based on the Xilinx Zynq® UltraScale+™ device.

The Board Management Starter Kit includes:

- A reference design that implements the core of a VITA 46.11-2022 Tier-2 or Tier-1 IPMC, using only low-power domain (LPD) peripherals of the Xilinx Zynq® UltraScale+™ device. This design is ready to be adapted for your VPX module or other intelligent Field Replaceable Unit (FRU).
- Firmware for that subsystem running on the real-time processing unit (RPU) of the Xilinx Zynq® UltraScale+™ device, delivered in source form—ready for simple and quick adaptation to the specific requirements of your product
- One-stop support from nVent for schematics and firmware, and delivering your Pigeon Point BMR-based IPMC, with complementary support from Xilinx

Software, schematics and documentation delivered via secure partner page

- Provides specific materials for your company
- Allows instant access to any updated materials that become available
- Example hardware design materials section of release page (next column) shows just one of provided variants for those materials

BMR-ZNQ-VPX IPMC schematics and bill of materials

- Schematics provided in PDF form
- Signal list provided to complement the schematics
- Bill of materials includes components for the core reference design

Board Management Starter Kit Add-on

The BMR-ZNQ-T3VPX-SKA Starter Kit Add-on is available for customers that need to develop compliant and interoperable VITA 46.11-2022 Tier-3 IPMCs. This kit is an add-on to the Board Management Starter Kit for Tier-2 or Tier-1 IPMCs and additionally includes access to the Tier-3 firmware source code, refer to the example BMR Release Page in the next column.

Pigeon Point BMR-ZNQ-VPX Release Page

Documentation

bmr-znq-vpx-ug.pdf	User Guide
bmr-znq-vpx-sa-ts.pdf	Software Architecture Specification
bmr-znq-ipmc-ha-ts.pdf	Hardware Architecture Specification

Hardware Design Materials

bmr-znq-ipmc-rd-schem.zip	BMR-ZNQ-VPX hardware reference design schematics
bmr-znq-vpx-ipmc-rd-bom.xls	BMR-ZNQ-VPX hardware reference design BOM
bmr-znq-vpx-ipmc-pin-list.xls	BMR-ZNQ-VPX hardware reference design pin list

Firmware Sources

bmr-znq-vpx-firmware.tar.gz	BMR-ZNQ-VPX firmware sources
bmr-znq-t3vpx-firmware.tar.gz	(restricted) BMR-ZNQ-VPX Tier-3 firmware sources

Technical specifications and User Guide

- Pigeon Point BMR-ZNQ-VPX IPMC Hardware Architecture Technical Specification
- Pigeon Point BMR-ZNQ-VPX Software Architecture Technical Specification
- Pigeon Point Board Management Starter Kit User Guide: BMR-ZNQ-VPX Edition

Readily adaptable firmware in source code form

- All mandatory and many optional IPMI/VSO commands supported over System IPMB
- Numerous Pigeon Point extension commands, primarily used over the payload and debug serial interfaces
- Sophisticated support for firmware upgrades in the field
- Simple—but highly flexible—configuration of firmware features

Ordering Information:

BMR-ZNQ-VPX-SK Part #: 21991-143	Stand-alone Board Management Starter Kit for VPX modules and other intelligent FRUs
BMR-ZNQ-T3VPX-SKA Part #: 21991-861	Board Management Starter Kit Add-on for supporting Tier-3 IPMCs on VPX Modules and other intelligent FRUs