



Pigeon Point™ BMR-H8S-EMMC-SK Starter Kit Board Management Starter Kit for μ TCA™ Modules

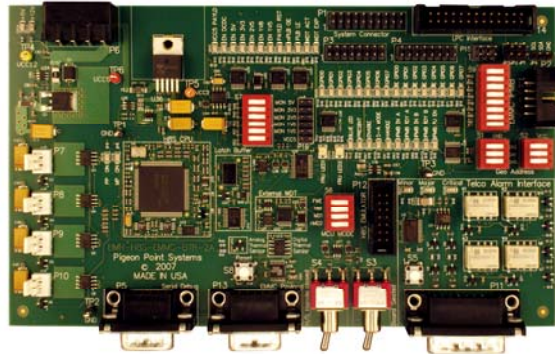
This Pigeon Point Board Management Starter Kit provides everything you need to quickly and cost-effectively develop a compliant and interoperable Enhanced Module Management Controller (EMMC) for μ TCA™. The kit includes:

- Schematics for a complete EMMC subsystem, ready for integration/adaptation into the design of your μ TCA module, such as a Cooling Unit or OEM Module.
- Firmware for that subsystem, delivered in source form and with development tools—ready for simple and quick adaptation to the specific requirements of your product.
- Bench top EMMC and supporting hardware so that you can immediately begin the ramp up process on μ TCA's IPMI-based management framework, without waiting for your custom hardware.
- One-stop support for hardware, firmware and software used in developing and delivering your Pigeon Point BMR-based EMMC.

The BMR-H8S-EMMC reference design is based on the H8S/2168 micro controller family from Renesas Technology. (The H8S/2168 family also includes the H8S/2167 and H8S/2166 controllers, which have larger built-in Flash capacities than the H8S/2168 and which are also supported by this reference design.) Please see the separate *Pigeon Point BMR-H8S-EMMC Product Brief* for more details.

Bench top EMMC

- Implements the BMR-H8S-EMMC reference design, including fan control and telco alarm facilities.
- Can be cabled together with the included BMR-H8S-MCMC BTR, which provides a bench top μ TCA context, including the Pigeon Point μ Shelf Manager™, μ Carrier Manager™, and MCMC functions, plus emulated an AMC site with MMC and a minimal emulated Power Module EMMC.
- Can be cabled together with an optional bench top Pigeon Point AMC Test Board to allow an arbitrary user-supplied AMC module to be included in the configuration.
- Bench top boards provide rich collection of headers, switches and connectors for experimentation in the lab with μ TCA management controller hardware and firmware operation.



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



BMR-H8S-EMMC Release

Documentation

[bmr-h8s-emmc-rn.pdf](#)
[bmr-h8s-emmc-ug.pdf](#)
[bmr-h8s-emmc-ha-ts.pdf](#)
[bmr-h8s-emmc-sa-ts.pdf](#)

Release Notes
User Guide
Hardware Architecture
Software Architecture

Hardware Design Materials (schematic/BOM)

[bmr-h8s-emmc-hwdesign.zip](#)

Hardware design files

Images and Utilities

[btp1a_cu.tgz](#)

Pre-built images for CU BTP

Source Code

[bmr-h8s-emmc-firmware.tgz](#)
[bmr-h8s-emmc-firmware.zip](#)

BMR Firmware in tgz format
BMR Firmware in zip format

Technical specifications and User Guide

- *Pigeon Point BMR-H8S-EMMC Hardware Architecture Technical Specification*
- *Pigeon Point BMR-H8S-EMMC Software Architecture Technical Specification*
- *Pigeon Point Board Management Starter Kit User Guide: BMR-H8S-EMMC Edition*

BMR-H8S-EMMC schematics and bill of materials

- Schematics provided in PDF form
- Bill of materials includes components for both the core reference design and additional parts used on the bench top reference implementation

Readily adaptable firmware in source code form

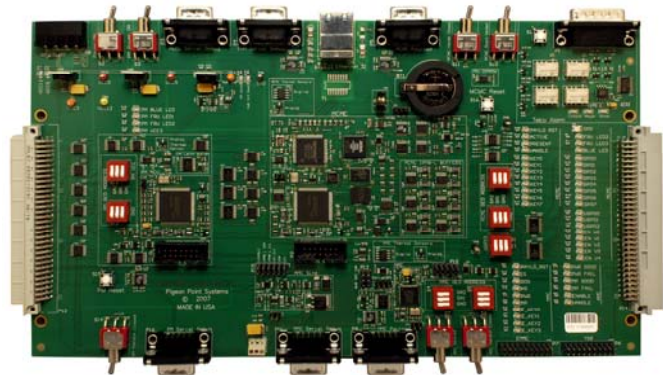
- All mandatory and many optional IPMI/μTCA commands
- Numerous PPS extension commands, primarily used over the payload and debug serial interfaces
- Sophisticated support for firmware upgrades in the field
- Simple—but highly flexible—configuration of firmware features

Comprehensive H8S development environment

- Cross GNU C compiler and binary utilities for H8S architecture
- JTAG-based debugging and firmware download
- Communication utility for Renesas JTAG emulator tool (purchased separately)
- Firmware download via H8S SCI_1 serial port using supplied utility provides alternative to Renesas JTAG tool

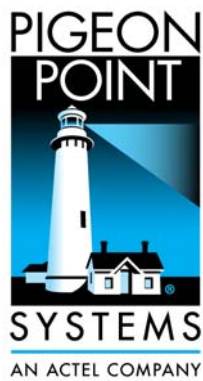
Included bench top MCMC board provides emulated MicroTCA Carrier context

- Implements the BMR-H8S-MCMC reference design and includes MCMC, μCarrier Manager and μShelf Manager firmware in binary form on the BMR-H8S-MCMC bench top.
- Includes emulated AMC site with a Module Management Controller based on the Pigeon Point BMR-AVR-AMCm reference design to function in the management role of an AMC installed in the MicroTCA Carrier
- Includes minimal emulated Power Module Enhanced Module Management Controller (EMMC) for bench top use



Ordering information

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| BMR-H8S-EMMC-SK | Stand-alone Board Management Starter Kit for μTCA EMMC-managed modules |
| BMR-H8S-EMMC-SKA | Board Management Starter Kit Add-on for μTCA modules (purchased as an alternative to BMR-H8S-EMMC-SK if another stand-alone μTCA Board Management Starter Kit has already been licensed) |
| BMR-H8S-EMMC-BTR | Bench top implementation of BMR-H8S-EMMC reference design |
| BMR-H8S-MCMC-BTR | Bench top implementation of BMR-H8S-MCMC reference design, including binary firmware for μShelf Manager, μCarrier Manager, MCMC, MMC and minimal emulated Power Module EMMC |



For more information, visit our website at <http://www.pigeonpoint.com>

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