ARM

Beetle ARM IoT Evaluation Platform

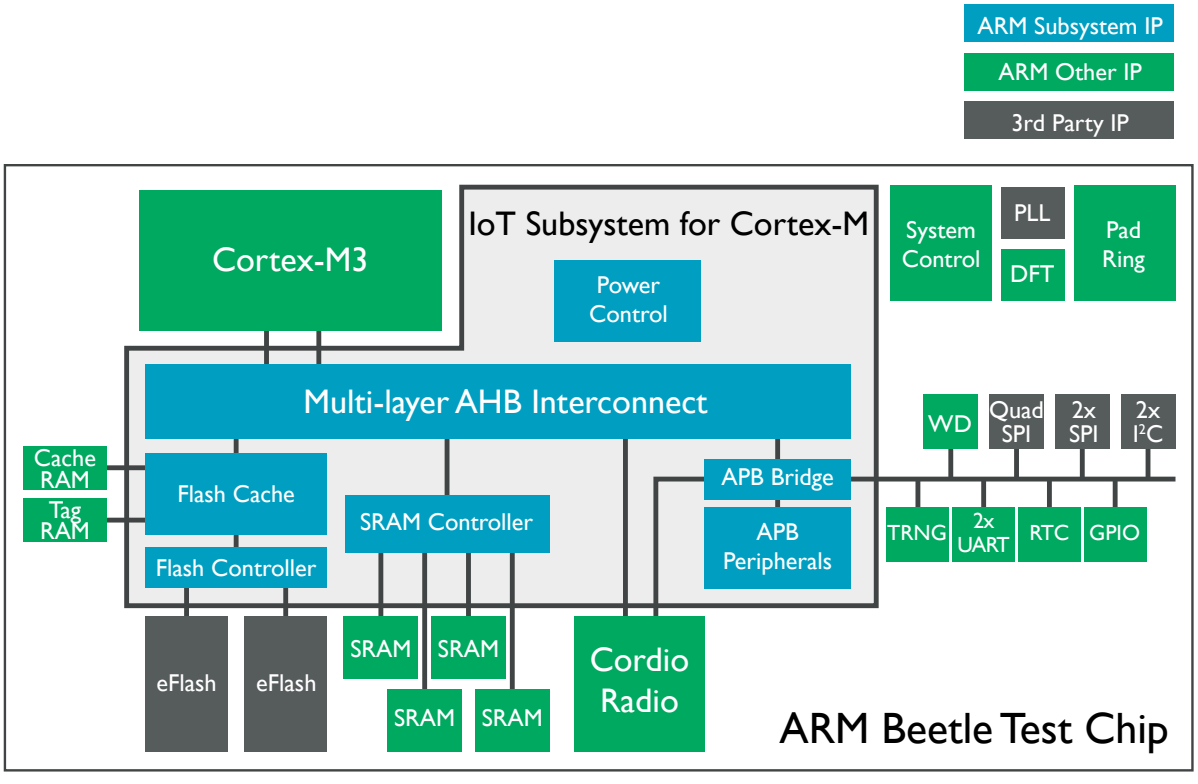
Overview

The Beetle IoT evaluation board is built around the ARM® IoT subsystem for Cortex®-M processors which allows design teams to create IoT endpoints faster and with lower risk. ARM's scalable IP solutions are designed to target across the value chain from sensors to servers. ARM's IoT subsystem with mbed OS is a complete reference system that reduces the complexity and risk of a SoC design for IoT endpoints. The subsystem features a range of peripherals and interfaces. It is specifically designed for the use with Cortex-M processors and ARM Cordio® Bluetooth® Smart Radio IP. ARM has taken this subsystem and generated a proof of concept platform called Beetle.

The central element of the platform is the IoT subsystem, which is pre-validated allowing the user to hit the ground running. ARM built on the IoT subsystem attaching the Cortex-M3 processor, Cordio Bluetooth Smart radio, TSMC embedded flash and a host of other complementary peripherals to make the Beetle test-chip.

The design is fully compliant with ARM's mbed IoT Device Platform to enable rapid development and prototyping. It's loaded with debug features includes JTAG, SWD, CMSIS-DAP and TRACE. It has support for expansion via Arduino® headers. It is an ideal platform for the evaluation of ARM IoT subsystems for Cortex-M.

A microcontroller-based configuration mechanism provides an easy, USB-based plug-and-play method for programming software and firmware into the system flash memory from an attached PC



ARMCORDIO
Radio Core IP

It Enables

- Evaluation of the ARM IoT Subsystem for Cortex-M.
- Development of mbed OS applications.
- Expansion via Arduino® connectors.

Software Overview

- mbed OS support including the ARM Bluetooth Stack and peripheral drivers.
- CMSIS-DAP support over USB with drag and drop programming to flash
- Virtual UART over USB

Features

- Form factor: 2.7 x 2.1 Inches
- ARM Cortex-M3
- ARM IoT subsystem for Cortex-M
- Cordio Bluetooth Smart radio
- 256KB of embedded flash
- 128KB SRAM
- 2MB of external QSPI flash.
- Debug :
  - JTAG
  - SWD
  - CMSIS-DAP with a virtual UART port
  - 4 bit TRACE.
- Expansion :
  - GPIO
  - UART
  - SPI
  - I2C
  - Analog signals

ARM

https://community.arm.com/groups/arm-development-platforms

Google search for this product
Search term: ARM Beetle Board

For More information
Web: