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QCVS Product Brief

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1 Introduction

This document briefly describes the QorIQ Configuration and Validation (QCVS) product, specifically its purpose, capabilities, distribution, and licensing model.

The QCVS product is targeted for engineers who perform board design or board bring-up of designs using Freescale's QorIQ system-on-chip (SoC) processors, including QorIQ LS series processors. It provides tools that assist in the configuration and validation of key hardware and software SoC features.

QCVS is a graphical user interface (GUI) - based product that is built on top of Eclipse (see www.eclipse.org for details). It is deployed as an Eclipse feature over CodeWarrior for Power Architecture / ARMv7 / ARMv8 or Eclipse 4.2 (or higher).

2 Product features

This section describes the features of the QCVS product.

The QCVS product supports:

- Configuration and validation of the double data rate (DDR) block. Support is provided for DDR2/3/4.
- Configuration and validation of the pre-boot loader (PBL) binary that is used to boot the platform
- Configuration and validation of the serializer/deserializer (SerDes) block
- Pin management for a custom board design
- Configuration of the parse-classify-distribute (PCD) feature of the data path acceleration architecture (DPAA) 1.x block

The configuration feature allows you to:

- View/customize the GUI of the memory-mapped registers or settings associated to an Internet protocol (IP) block or device functionality
- Validate against various constraints the user programming for a particular IP block or device functionality
- Generate the code used to program a device IP block or functionality

The validation feature depends on the IP block being validated. It requires you to use a probe (for example, CodeWarrior TAP) for connecting to the target. The validation feature helps you to:

- Read the IP block settings of the target
- Run a set of validation scenarios (depending on the IP block) and display the results in a decoded format. This helps in determining whether or not the IP block is programmed optimally.
- Easily find out an optimal IP block configuration from a set of valid configurations

3 Licensing

The validation feature of QCVS is licensed as per the CW4NET licensing tiers.

To purchase a license, use the link, www.freescale.com/cw4net.

4 Distribution

QCVS is distributed as an add-on for CodeWarrior (for PA/ARMv7/ARMv8).

Each distribution model requires a different installation. For details, see *QCVS Installation Guide*.

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