CodeWarrior™ USB TAP
Run Control for Freescale™ Processors

The CodeWarrior™ USB TAP host target interface is a feature-packed, no nonsense run-control tool that allows developers to save precious development time during target bring-up and debug providing visibility into and control of Freescale™ on-chip debug (OCD) features. The USB TAP integrates seamlessly with the CodeWarrior integrated development environment, giving the developer a powerful tool for complex debug tasks. The USB TAP features broad Freescale processor support, complete run-control functionality and flash programming for fast downloads and convenient production testing.

Highlights
> High-speed USB 2.0 download

> Device is self-powered requiring no external power supply

> Run-control visibility and control

> Flash memory programming

> Low voltage target support

> Fully integrated with CodeWarrior tools and supports all CodeWarrior run-control debug features

Detailed Features
> Gain optimal performance:
  ▪ Split-second single-step execution
  ▪ Fast code download to target, depending on processor and target design
  ▪ Control and debug your software running in-target, with minimal intrusion into target operation

> Use software or hardware breakpoints

> Crash-proof control of the target processor

> Obtain and modify register contents

> Display and modify memory

> Control instruction execution

> Run/stop/step/reset

> Available with a variety of connectors to support a wide array of Freescale processor families

> The combination of USB TAP and CodeWarrior Development Studio provides:
  ▪ Powerful C/C++ C/C++ source correspondence
  ▪ Debug in ROM, RAM, and flash memory

Benefits
Visibility — In conjunction with the CodeWarrior debugger, the USB TAP makes it possible for a developer to view registers and the current state of target memory. Program execution can be halted at predefined states, and data for a particular program state can be examined.

Control — The state of the target system can be conveniently controlled by downloading code, manually modifying processor registers and memory, single-stepping through the code, or setting breakpoints.

Transparency — When using the USB TAP it is virtually indistinguishable from non-debug target execution.

Companion Products
For network or Ethernet debug capability, the CodeWarrior Ethernet TAP run-control product allows you to tap into the full potential of your chosen Freescale microprocessor and associated peripherals providing you with an Ethernet-connected, crash-proof development environment to conduct processor system test, debug and integration.

Part Numbers
USBTAP DPI (PQI) CWH-UTP-PPCD-HE

USBTAP JTAG (PQ II/III) CWH-UTP-PPCC-HE

USBTAP JTAG (ColdFire) CWH-UTP-CF-HE

USBTAP ONCE (DSC) CWH-UTP-ONCE-HE

Learn More: For more information about Freescale products, please visit **www.freescale.com/codewarrior**

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