



# Freescale CodeWarrior Development Tools CodeWarrior TAP

## Combining USB and Ethernet into one TAP

### Overview

CodeWarrior TAP enables Freescale target system debugging via a standard debug port (usually JTAG) while connected to a developer's workstation via Ethernet or USB. CodeWarrior TAP may also be referred to by industry-standard terms such as probe, JTAG probe, JTAG emulator or target probe.

Using CodeWarrior TAP's Ethernet connection, developers can debug systems remotely or more effectively share a single system with multiple developers. When a shared system is not needed, CodeWarrior TAP connects directly to the developer's workstation with a single USB cable. Power is supplied by the USB port so that no additional cables are needed.

CodeWarrior TAP is designed to work in conjunction with CodeWarrior development tools and Freescale processors. It is a critical debug tool in all phases of the project and is necessary for debugging systems prior to running a fully debugged operating system.

### Features

- Allows either USB or Ethernet (10/100) host connection for the developer workstation
- USB powered, even when using Ethernet
- Low-cost removable probe tips sold separately
- Supports debugging via JTAG interface
- Automatically supports system voltage levels from 1.2 to 3.3
- Supports all available core speeds and voltages for supported Freescale processors
- As a convenience feature, CodeWarrior TAP can connect to a target system's serial port allowing telnet access to a remotely located system and control of the u-boot program

- In conjunction with the CodeWarrior development system, CodeWarrior TAP:
  - Programs system flash memory during debug and development phases of the project, including most popular flash memories, but specifically all flash memories used with Freescale development systems
  - Controls the target development system even when the system may have crashed during development
  - Offers complete system visibility and control, including reading/writing of CPU registers, memory mapped registers, block reading/writing of memories, single step debugging, setting software and hardware breakpoints, and monitoring target system status
  - Gives control over the target system execution, including control of one or all cores and resets

Contact Freescale for information regarding:

- Integrating this probe into your software
- Utilizing this probe as your target debug probe



## System Requirements

- 10/100 Ethernet or USB on host computer
- Probe tip that matches the debug target

## Supported Devices

- QorIQ communications processors
- StarCore DSPs
- PowerQUICC communications processors

## Kit Contents

- CodeWarrior TAP probe
- CodeWarrior TAP probe USB power supply
- CodeWarrior TAP USB cable
- CodeWarrior TAP RJ25/DB9 adapter
- CodeWarrior TAP serial cable
- Tip not included (must be ordered separately)
- Ethernet cable not included

## Order Information

CodeWarrior TAP and associated tips can be ordered at **freescale.com** or from an authorized Freescale distributor.

Part number for the base (this device):

- CWH-CTP-BASE-HE

Part numbers for related tips:

- CWH-CTP-COP-YE: Connects to QorIQ and PowerQUICC II, II Pro and III Power Architecture® processors
- CWH-CTP-STC-YE: Connects to StarCore DSP processors

## Support Policy

- Includes 12-month technical support



For the latest information on CodeWarrior TAP, including updates and additional devices, visit [freescale.com/CWTAP](http://freescale.com/CWTAP)

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