



Networking Services Trusted at every level and every phase



freescale.com/NETservices



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Networking Services

Overview

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Freescale has over 1000 in-house software resources providing networking expertise, software and development tools for QorlQ communications processors and QorlQ Qonverge baseband processors, reference platforms, VortiQa software runtime products built around standard platforms and Linux[®] services such as software development kit (SDK) support. These capabilities, including commercial support and custom engineering projects, are available to customers via Freescale's trusted networking software and services portfolio.

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ADS

Comprehensive Solutions

Freescale's networking software and services portfolio provides a comprehensive set of Linux-oriented development services for QorlQ communucations processors based on both Power Architecure® and ARM® technology, StarCore DSPs and QorlQ Qonverge embedded systems. These services accelerate customer time to market, assure the quality of your products and ultimately the satisfaction of your customers. Freescale's services can be tailored to address any portion of your design cycle from project inception to your final end-of-life announcement.

Freescale will guide you through the tough decisions, including selecting the right Freescale silicon, development tools, software stacks and third-party intellectual property. Our dedicated expert staff, with direct access to software and SoC teams, can support your effort through every phase of development. Freescale's networking software and services solutions provide unique integration with Freescale silicon design teams that are leveraged in every aspect of supporting your products.

Why Outsource?

Freescale's networking software and services portfolio allows you to spend less time on day-to-day tasks and more time perfecting your new, differentiated technologies. We'll help you to create success by increasing your team's productivity, as well as decrease your time to market. We also make it easy for you to navigate through periods when your business activity spikes. And when you do need additional consultants to keep up with your workload, we are there to help. We will be there to assist your team as a single vendor with solutions to support each and every phase of the development cycle.

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Software and Services Portfolio

The following is a list of networking software services that Freescale provides to customers.

Development Tools	Runtime Products	Solutions Reference	Linux [®] Services	Integration Services
odeWarrior IDE Debug Compiler Trace Scenarios Tools DDrV AIOP Analyzer	 Vortiqa Software Products Application Identification Software (AIS) SDN Solutions Mobile Transport Layer 1 Application Solution Kit (ASK) NAS, BHR Network Services Switch iNIC 	 Storage Controller Smart SDN+NFV Virtualization Network Platform Wireless LAN (AP) Data Connector Smart Converged IOT Gateway Digital Signage NVR Video Surveillance DLNA Media Streaming Server 	 Commercial Support Frozen Branch Application Specific Hardening Feature Acceleration 	 Systems Consulting Design Services Porting Migration
CodeWarrior QorIQ	VortiQa	? !		Öø

Software Engineering Services

- System consulting (such as IPSec, NFV, or SDN based systems)
- Project assessment
- Requirement gathering
- Design services, including software IP licensing
- Custom development (complete QorlQ project outsourcing)
- Priority Linux software support
- Porting/Migration (update PQII, PQIII, QorlQ older kernels to newer more secure Linux kernels)
- Integration
- Long-term production support (maintain customer specific code, bug fixes, patches, and security monitoring)
- Performance analysis (diagnose QorlQ systems to find where performance can be increased)
- Performance optimization (via labor, libraries, or both, improve throughput, power consumption of QorlQ, Qonverge, and PowerQUICC systems)
- Multi-core software partitioning (engage Freescale expertise at threading QorlQ Linux systems for maximum multicore performance)
- Testing, test infrastructure and test management (take advantage of Freescale's worldwide 24/7 automated test infrastructure)

Specialty IP Sampling

- QorIQ IPSEC proprietary libraries (more speed, better security)
- In-system counter monitoring libraries
- In-system trace monitoring libraries
- Custom SoC simulators
- Host system (Lin/Win) CodeWarrior TAP management libraries
- In-probe debug libraries to enable 3rd party JTAG probes
- Specialty communications microcode libraries (DPAA, QE, and more)
- Specialty crypto-accelerator libraries
- Detailed chip specific XML description libraries (entire QorlQ register sets)
- VortiQa communications software stacks
- Ethernet Layer 2 (L2) switch libraries and API drivers
- LTE PHY L1 software including conformance testing
- Custom LS2, LS1, QorlQ, QorlQ Qonverge simulators including detailed communications datapath simulations targeted for tasks that are inappropriate for the actual hardware.
- Reference design libraries (like FSL SAN solutions for QorIQ)

Key Benefits

- Dedicated project management
- Extend your development capabilities
- Reduce time to market
- Focus on core competencies and differentiation
- A single-source solution throughout the development cycle
- Freescale is a trusted global partner with 30 years of experience in embedded processors.



Development Tools

Linux Services

Freescale's networking software and services solutions encompass world-class embedded expertise, technologies and support for multiple architectures and operating systems especially QorlQ platforms with Linux. Freescale has a seasoned Linux development team that can help you with evolving open source and embedded technologies.

From our Linux SDK, customers can extract Freescale-developed Linux board support packages (BSPs). These BSPs provide our customers with a comprehensive starting point for their Linux development efforts on a variety of platforms and the most modern Linux kernels. These BSPs are tested in a systematic and repeatable test system. This test system includes high performance telecommunications industry test equipment for use with a given processor and its supporting development system, ensuring an operational tool chain, kernel and specific peripherals that are ready to use together within a fixed configuration for specific hardware reference platforms.

But the SDK is only the starting point. Often, this is where Freescale services can be the most beneficial to customers' projects.

www.freescale.com/linux

CodeWarrior for Networking

CodeWarrior Development Studio is a comprehensive Eclipse-based embedded software development tool that provides a visual and automated framework to accelerate the development of the most complex embedded applications, such as multiple heterogeneous multi-core chips arranged in a multiboard configuration. Across most stages of the development cycle, Freescale offers multicore tools to help configure, debug and optimize your entire design built on Freescale QorlQ and PowerQUICC processors. This tool provides solutions to get your design up and running fast.

www.freescale.com/cw4net

VortiQa Software for Networking

Freescale's VortiQa software products are designed to reduce your time-to-market for building state-of-the-art networking and communications equipment. VortiQa application software product line addresses specific vertical markets such as enterprise, SMB, and service provider equipment, wireless infrastructure equipment, and cloud and data center equipment. This highly optimized and portable software runs on wide range of Freescale communications processors. The VortiQa application software product line provides flexible integration and management infrastructure.

www.freescale.com/vortiqa

Solutions Reference Platforms

Freescale has extensive experience designing high-volume production boards and providing required firmware and software. Our board design experts have a breadth of knowledge from design and schematic layout to selecting and qualifying components, ensuring smooth production. Thanks to our world-class SoC experts, we can work quickly to identify the root cause of problems found during test, whether they are silicon, board or software-related. We know what it takes to successfully deliver custom board solutions for mass production.





Security Appliance



Enterprise AP-WLAN

Networking Platforms

- Security Appliance
- Enterprise AP-WLAN
- DLNA VOD Video-on-Demand
- Network Video Recorder (NVR)
- Multi-service Gateway (Media & Voice Gateway)
- Network Attached Storage (NAS)
- Storage Area Network
- Wireless Media Gateway
- Networked Smart Gateway
- Smart Energy Gateway
- Industrial Gateway
- Data Concentrator



DLNA VOD — Video-On-Demand

NVR – Network Video Recorder



Multi-Service Gateway (Media & Voice Gateway)



At Freescale, we are committed to delivering comprehensive services to our customers by leveraging our in-depth vertical market knowledge to build integrated, total solutions. Freescale's networking services and software offerings are focused on your success and will deliver the solutions you need to ensure you meet your business objectives.

To learn more, visit freescale.com/NETservices



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