

Cavium Networks Software & Services

Architecture Plus™

Product Brief

OVERVIEW

Defining the system software architecture is one of the most critical development stages with any new processor especially one based on multi-core technology. Leading a product development effort with detailed architecture and performance analysis can make the difference between a successful project and one where performance, schedule and feature sets fall short of expectations. Cavium Networks can help with these crucial decisions. Architecture Plus™ is a value added service provided by a dedicated team of Cavium senior architects with the purpose of accelerating OCTEON™ family software development programs. Architecture Plus™ delivers a tailored analysis of your specific software development objectives culminating in a detailed report recommending data and control plane system architectures, performance modeling, project planning and schedule estimates. Architecture Plus™ also assist in mitigating project risks and reducing overall development costs. By choosing to use the Cavium Networks Architecture Plus™ service your project benefits from the independent recommendations of OCTEON™ and networking industry experts.

FEATURES

Capture Product Requirements

Develop Detailed SW Architecture:

- Architect overall system software diagram
- Architect control plane/data plane separation method
- Description of SW interfaces & modules

Performance Analysis:

- Identify Performance Metrics
- Develop a model for each software function
- Calculate overall system performance
- Map software functions to multi-core environment

Memory Analysis:

- Identify and size important data structure
- Develop system buffer requirements
- Determine total memory required

Project plan development:

- Develop schedule
- Estimate resource requirements

Testing plan and risk analysis:

- Present testing methodology
- Identify performance and project risks

Deliverables:

- In-depth, interactions with customer project team to capture requirements and to develop architecture and project plans
- Comprehensive Architecture Plus™ analysis document covering review results and recommendations
- Architecture Plus™ results review & presentation

BENEFITS

Project Acceleration

- Shorten architecture and project preparation phase
- Shorter Design & Development phase with experienced architecture planning

Cost Reduction

- Shorter architecture phase
- Shorter development phase
- Lower hardware costs with well defined software architecture requirements

Risk Mitigation

- Avoid long-term performance bottlenecks
- Avoid development phase delays and rework
- Experienced outside validation or architecture & performance targets

Limited Task Duration

- One calendar month duration for the Architecture Plus™ program



ORDERING INFORMATION

Solution & Services Products	Part Number	Description
Architecture Plus™	CN-ARCHPLUS	Cavium Networks engineering service to analyze, architect and plan optimal OCTEON™ software development and porting tailored to your application requirements
Development Plus™	CN-DEVPLUS	Cavium Networks engineering service to develop wire-speed, multi-core applications
Performance Plus™	CN-PERFPLUS	Cavium Networks engineering service to implement performance analysis and provide specific recommendations or assistance with code tuning for existing customer applications