Definitions 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.

OVERVIEW

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

OVERVIEW

Cavium Networks Software & Services

Architecture Plus™
Product Brief

ARCHITECTURE PLUS™

Solution & Services Products   |   Part Number   |   Description
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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