
XGS Architecture and SDK Fundamentals

Broadcom University Training Session
July 31 -August 3, 2018 (4 Day Class)

Location: [280 Innovation Drive, San Jose, CA 95134](#)

Introduction:

The XGS Architecture and SDK Fundamentals training class will help customers understand the core principles of the XGS architecture and the associated SDK/APIs. The four day class features a number of hands on lab exercises enhancing learning experience and reducing development and debug time.

Course Objectives:

- Be able to fully understand XGS architecture for several key features
- Learn the underlying hardware mechanisms and software implementations
- Effectively use BCM API and several key debugging tools to productize features

Target Audience:

- Network & System Architects, Protocol Stack Designers, Software Application Developers, and Software Quality Engineers.

Background Material:

Registered students will be provided online video access to key background materials. Here is a list of course materials that need to be viewed prior to class

<https://broadcom.box.com/v/xgs-arch-sdk-funda-pre-req-lst>

Registration Link: <https://goo.gl/forms/nOo87yoOSFH2MDsn2>

XGS Architecture and SDK Fundamentals Topics

XGS Architecture (Hardware and Software)

- Packet Processing Pipeline
- Packet Flows
 - Layer 2 Switching
 - Layer 3 Routing
 - Tunneling Protocols - MPLS, VxLAN
- Content Aware Processor (CAP)
- Buffering and Scheduling
- Load Balancing
- Telemetry
 - PSTATS
 - BST
- Debugging
 - System Level Debugging
 - Packet Processing Pipeline Debugging
 - Counters
 - Warmboot Debugging

SDK Sessions

- System Requirements and Release process
- CINT
- KNET
- Diagnostic Shell
- Warmboot

Hands On Labs

- Device Bring-up and Low Level Access
- Packet Flows, CAP, Load Balancing, Telemetry, Scheduling and Queueing, Debugging
- CINT, KNET, BCM API Programming, Diagnostic Shell.

Business Terms:

1. **Class Date:** July 31-August 3, 2018
2. **Discount Deadline:** 7/10/2018 (Registration and PO need to be submitted before this date to receive the stated discount)
3. **Registration Deadline:** 7/17/2018 (Registration after this time will not be admitted to the class).
4. **Class fee:** \$4000/seat (\$2000/seat with early bird discount)
5. **Registration Process:** Students must register for the class online. Due to capacity limitation, registration process will be halted once the class is full. Customers are encouraged to sign up early to insure they get admitted.
6. **Discount amount and deadline:** 50% discount will be applied if 1) the student registers before the Discount Deadline and 2) the PO is received before the Discount Deadline.
7. **PO:** PO must be received by Broadcom by the Discount Deadline to receive the discount or by the Registration Deadline otherwise. In addition, a copy of the PO should be submitted to the class administrator (email: sudarshan.suresh@broadcom.com). We recommend a single PO for students from each company. The PO should use Part Number "BRCM-UNIV-XGS101" and mention the class name ("XGS Architecture and SDK Fundamentals") and date (July 31- Aug 3, 2018).

The PO should be addressed according to the following:

| Training hosted in the U.S. | Training hosted outside the U.S. |
|---|--|
| Avago Technologies U.S. Inc 1320 Ridder Park Drive San Jose, CA 95131 | Avago Technologies International Sales Pte. Ltd. 1 Yishun Ave 7 768923 Singapore |

The PO should state the following:

- PO should be addressed to:
- Part Number: BRCM-UNIV-XGS101
- Class name: XGS Architecture and SDK Fundamentals
- Class Date: July 31-Aug 3, 2018
- The name of the students planning to attend.

8. **Cancellation deadline:** Registrations can be cancelled at any time before the Discount Deadline without incurring penalty. Cancellation after that point will incur a penalty equal to 50% of the amount due. Student substitution can be made up to 3 business days before the class start date free of charge.