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Get Started with the SJA1110-EVM

This page will help guide you through the process of learning about your SJA1110-EVM board.



1. Get started

The NXP® analog product development boards provide an easy-to-use platform for evaluating NXP products.

The SJA1110-EVM is an evaluation board for the SJA1110 automotive Ethernet switch. The board includes two SJA1110A switches and it enables the evaluation of all supported features including AVB, TSN and the control of two switches in cascaded configuration. It is compatible the SJA1110 software development kit (SDK) and the optional AVB/gPTP middleware (available separately).

The board offers 13x 100BASE-T1 PHYs, all compatible with OPEN Alliance TC10 wake-up Forwarding. It also offers 1x 100BASE-TX and 1x 1000BASE-T PHYs with RJ45 connector, as well as three generic SFP and SFP+ connectors for external multi-gig PHYs.

The SJA1110-EVM board supports the SABRE connector capable of mating with NXP processor and controller motherboards such as i.MX and S32x processors families.

This page guides you through setting up and using the SJA1110-EVM evaluation board.

1.1 Kit contents/packing list

The **SJA1110-EVM** contents include:

- Assembled and tested SJA1110-EVM in an anti-static bag
- Power AC-DC adapter, 12 VDC @ 1 A, 5.5 x 2.1 (mm) output connector, with four interchangeable plugs
- Subscription card

1.2 Additional hardware

In addition to the kit contents, the following hardware is necessary or beneficial when working with this kit.

- Micro USB cable
 - Needed for Python tools
 - Needed for SDK when using OpenSDA (instead of another debugger; for a list of supported debuggers, see SJA1110 SDK documentation)
- Small screw driver (1.8 mm) for the screw sockets of the T1 ports
- SFP (for connecting to the SFP receptacles):
 - 1000Base-T SFP Copper Rj45 10Gtek ASF-GE2-T
 - Aquantia AQS-109-B0C2-CB
 - AXCEN AXGT-R1T4-05I3
- SGMII DAC cable (for connecting to the SFP receptacles):
 - MikroTik SFP+ 1m S+DA0001

1.3 Software

Depending on the use case for this board, installing software is necessary.

- SDK for configuration of the switch and programming of internal microcontroller
- Python configuration and host tools for switch configuration
- Linux® driver for configuration of the switch using external microcontroller
- gPTP example software upon request (optional)

1.4 User manual

Refer to AH1901, SJA1110 evaluation board for additional details on the featured components and board configuration.