

- ▶ 4xFC611 based on TJA1100
- ▶ 7-Port USB-Hub
- ▶ NXP SJA1105Q-EVB (includes 2x TJA1102)
- ▶ Full access to switch and all 8 Phys
- ▶ Flexible Software APIs

The 100Base-T1 Evaluation Kit for Automotive Ethernet. Compact and flexible Layer-2 validation, reference and test-setup

The FC911 is a pretty compact hardware design to focus and verify pure Layer-2 traffic between an Automotive Ethernet switch and 4 end nodes. All required hardware is fixed in a 15 inch notebook bag to be extended with a notebook as USB host and power-plug for 12 V adapter. Modular design enables quick start as reference and possibility to create and re-use at different setups using own ECU designs as DUT.

Features

- ▶ NXP TJA1100/TJA1102 Automotive Ethernet Phys
- ▶ Broadway2-API to get full raw access of all traffic
- ▶ Use NXP SJA1105Q Tool-SW for creating switch-hex files
- ▶ USB-centric access to switch and all 4 nodes
- ▶ UTP connections pre-configured for easy start
- ▶ Software API to access all features of TJA1100

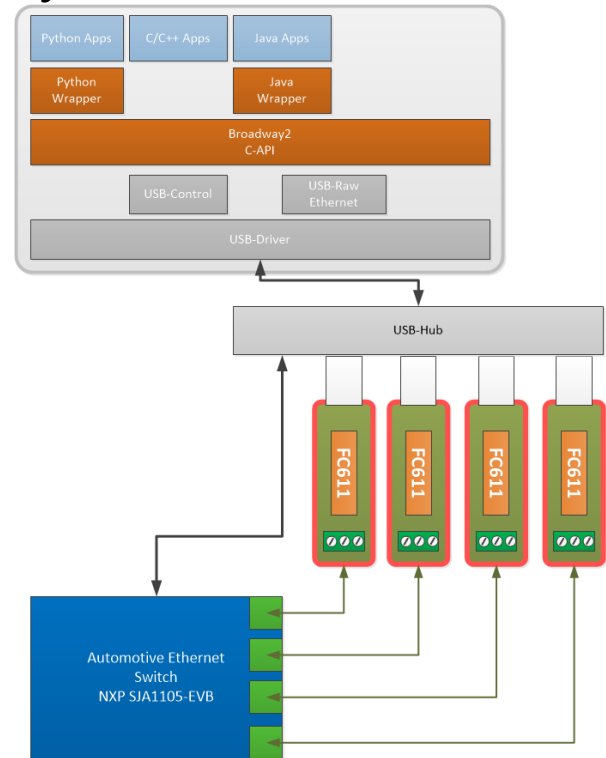
Applications

- ▶ Starter-Kit to learn and validate NXP Automotive Ethernet
 - ▶ Full-access to SJA1105Q, TJA1102 and FC611/TJA1100 via USB
 - ▶ Configure and verify different switch profiles
 - ▶ Read/Write access to all phy connections via USB
- ▶ Test-Kit for different switch profiles
 - ▶ VLAN nodes
 - ▶ Policy-Rules
 - ▶ Mirroring
 - ▶ ...
- ▶ Reference-Kit for own ECU-designs
 - ▶ verify switching rules
 - ▶ replace FC611 with custom ECUs

Basic information

- ▶ Pre-Configured Kit-Setup
- ▶ NXP SJA1105Q-EVB or SJA1105T-EVB
- ▶ 4xFC611 (using NXP TJA1100)
- ▶ Simple UTP connectors on all ports
- ▶ Powerful and flexible API for SMI Register Access
- ▶ Python modules to configure and access switch and phy
- ▶ Python abstraction class for TJA1100 MDIO registers

System-Overview



Typical use-cases

- ▶ Full network setup with focus on Layer2
- ▶ Low-Level switching traffic
- ▶ Extendendable with own custom designs
- ▶ Python tooling including MultiRawReceiver and MultiRawSender

Software

- ▶ Python access via USB to switch/phys and End-Points (FC611)
- ▶ Central access to all network nodes with one USB-host
- ▶ Running on USB-hosts: Windows 7/10, Raspberry Pi, Ubuntu, ...

More information at www.fibrecode.com