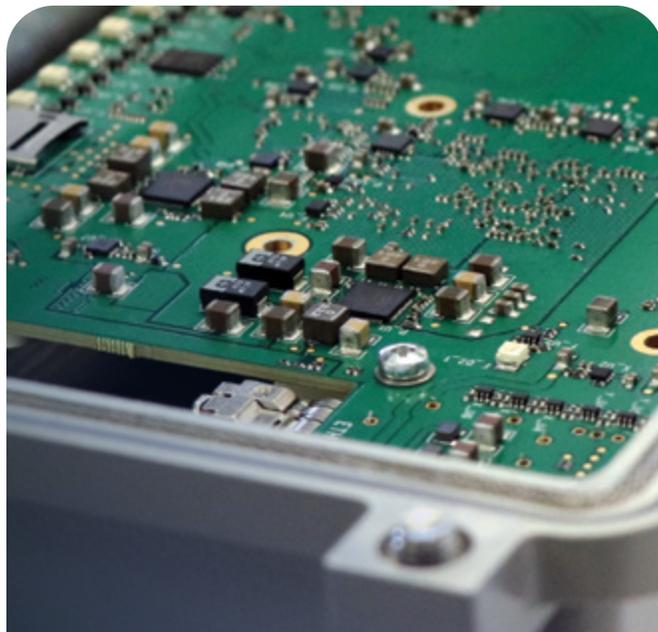


Remote PHY

Distributed Access Architectures (DAA)

Scalable & flexible FPGA-based designs applicable to all DAA

Calian provides solutions for all distributed access architectures (DAA). Our mature portfolio of Remote PHY DOCSIS technologies and advanced signal processing algorithms offers powerful and dynamic solutions for our customers.

**AMD** Adaptive
Computing
Partner**SELECT
CERTIFIED**

By combining Calian DOCSIS signal processing with our embedded hardware designs, we can enable your Remote PHY and other distributed cable access technologies.

- Remote PHY architectures
- Flexible MAC architectures (FMA)
- Distributed CCAP/virtual CMTS
- FDX Remote PHY

Calian offers custom hardware design and manufacturing of Remote PHY modules, suitable for integration into existing or new fibre node products.

Calian is an AMD Adaptive Computing Partner, and we create AMD Xilinx programmable-based designs for our customers. Our programmable designs address new industry standards like DOCSIS 4.0 and other network requirements.

The Calian complete suite of remote PHY IP includes:

- R-DEPI / R-UEPI packet processing
- SC-QAM & DOCSIS 3.1 OFDM modulation
- DOCSIS A-TDMA & OFDMA burst receivers
- R-OOB: SCTE 55-1 / 55-2, NDF, NDR, pilot tones
- R-DTI DOCSIS timing

Calian programmable designs are engineered to help our customers to differentiate themselves, expedite time to market, and deliver “future-proof” solutions that adapt to changing requirements.

Remote PHY Distributed Access Architectures Specifications

Parameter	Specification
Input	
Number of inputs	16 MPEG2 MPTS streams
PCIe	PCIe Gen 2
ITU-T J.83 modulation	
Annex support	A / B / C
Number of RF channels	16
MER (unequalized)	> 35 dB
Constellation	64 QAM, 256 QAM
Symbol rate range	5.056941 (64 QAM), 5.360537 (256 QAM)
Interleaver	All supported
Output	
RF channels	Carriers agile within a 160 MHz window
Frequency range	46 to 640 MHz
Power range	54 - 60 dBmV Composite (42 - 60 dBmV per channel)
Power step size	0.1 dB
Power accuracy	±1 dB
Frequency step size	~1 Hz
Amplitude flatness	0.25 dB p-p over any 6 MHz slot
Connector	F-connector (75 ohm)
Power	
Power	< 25W
Control interfaces	
Drivers	Linux source code provided
Physical	
Size	PCIe form factor
Weight	1 pound (TBC)
Environmental	
Operating temperature	0°C to 40°C
Storage temperature	-40°C to 85°C
Humidity	Operating: 0% to 50% non condensing (max 80% for temperatures up to 31°C, decreasing linearly to 50% at 40°C) Non-operating: 10% to 95% non-condensing
Card certification	Subpart B of Part 15 of FCC Rules for Class B digital devices, EN 55022, EN 55024