

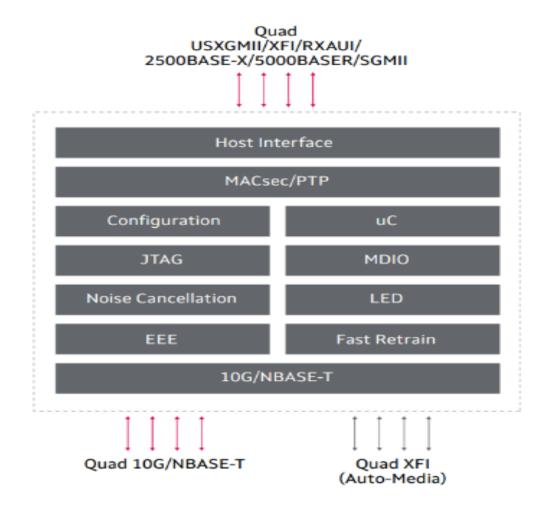
FRONTGRADE

10G Quad Ethernet PHY

UT88ETHPHY4P10G - 4 Port 10G Ethernet PHY

Introduction

The UT88ETHPHY4P10G is a fully IEEE 802.3an 10GBASE-T or NBASE-T compliant, 4-port Ethernet physical layer transceiver (PHY) device. This device enables both copper and fiber applications with its unique auto- media-detect mode. The media plug-and-play feature enables the transceiver to automatically switch between fiber or copper line-side interface without user involvement. The device is compliant to the IEEE802.1ae MACsec protocol, and the Energy Efficient Ethernet (EEE) IEEE 802.3az protocol for all speeds. IEEE 1588v2 or Precision Time Protocol is also supported for time stamping and SyncE support.





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This device operates at 6 speeds 10M, 100M, 1G, 2.5G, 5G, 10G and supports a wide variety of host-side interfaces including USXGMII, XFI, RXAUI, 2500BASE-X, 5000BASE-T, and SGMII. This allows it to support ethernet applications for a wide variety of processors and FPGA's, including Frontgrade's CertusPro-NX-RT, as well as AMD/Xilinx, Microchip offerings.

Part Number	UT88ETHPHY4P10G
Speed	10M, 100M, 1G, 2.5G, 5G or 10Gbps
Interfaces Supported	USXGMII, XFI, RXAUI, 2500BASE-X, 5000BASE-R, and SGMII
Footprint	23mm x 23mm
Package	484 HFCBGA
Number of Ports	4
Temperature Range	-40C to 85C Ta, 105Tj
MACsec function	full IEEE 802.1ae compliance
	supporting default cipher suite GCM-AES-128
Precision Time Protocol	IEEE 1588v2 supported for time stamping and SyncE support.
Operational Environment	
Target TID:	50 krad



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SEL Immune:	≤ 49 MeV-cm2/mg at 85 C
SEU:	TBD Errors/Bit-Day and onset LET
Qualifications	Frontgrade Space Y QD – Q2 2025 Frontgrade Space Y L2 - Q4 2025 Frontgrade Space Y L1 - Q1 2026

Availability

Prototypes - Q2 2025

Space Y QD - Q2 2025

Space Y L2 - Q4 2025

Space Y L1 - Q1 2026