



5VT1822 is a network processor-less solution for two-pair bonding based on ITU-T G.998.2 and IEEE 802.3ah Ethernet port aggregation function.

5VT1822 features a high-performance hardware Port Aggregation Function (PAF) to support bonding of two G.Fast/VDSL2 ports to enable up to 2-gigabit-per-second bandwidth to users. Three RGMII interfaces connect 5VT1822 to a gateway SoC, such as 5VT2516 and a pair of G.Fast transceivers, such as the Skipio CP1000 G.Fast CPE chipset, for packet forwarding. A 2-pin serial interface is provided for gateway SoC to enable bonding functionality and polling status maintained by 5VT1822.

5VT1822 optimally distributes traffic to the two G.Fast transceivers based on bandwidth of each loop. It also supports an option to disable fragmentation to improve bandwidth efficiency of bonding. 5VT1822 is all that is needed besides the extra G.Fast transceiver chipset to offer twice the bandwidth for G.Fast customers.

Quick time to the market with 5VT1822

5VT1822 is easy to integrate with existing mature single-WAN-port gateway solutions, e.g. 5VT2516, making it possible to quickly roll out your G.Fast bonding CPE solution with minimal efforts and time possible.



Key Features

G.998.2

- ▶ 802.3ah Ethernet-based PME Aggregation function to implement bonding of 2 G.Fast/VDSL2 ports
- ▶ Downstream/Upstream up to 1/1-Gbps G.Fast Bonding Bandwidth
- ▶ Maximal 1:8 speed ratio
- ▶ 65,000 bit time max.differential delay for link speed as slow as 1 Mbps
- ▶ Fragmentation of Ethernet packets into 64- to 512-Byte fragments
- ▶ RFC6765/6767 and TR-159 MIB

Interfaces

- ▶ 3x RGMII, fixed at 1 Gbps only
- ▶ 1x MDC/MDIO

Power Supply Voltages

- ▶ Core : 1.5V
- ▶ I/O : 3.3V

Package

- ▶ LQFP-64 E-PAD



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