

BRIGHTLANE™ AVB switch



7-port unmanaged AVB switch with energy efficient Ethernet

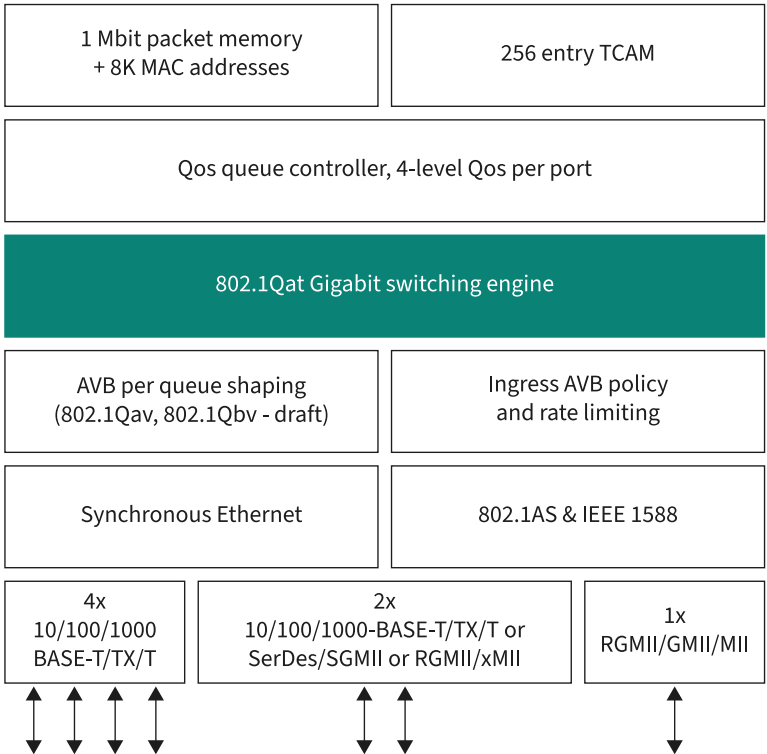
Infineon’s first-generation automotive BRIGHTLANE™ Ethernet switch, 88EA6352, is a 7-port Ethernet gigabit capacity switch with audio/video bridging capabilities as per IEEE802.1 AVB standards’ supporting Energy Efficient Ethernet (EEE) for reduced power consumption.

The 7-port Ethernet switch offers 5 integrated IEEE 10/100/1000BASE-T/TX/T PHYs, 2x RGMII/MII/RMII /GMII ports, and 1x SGMII or SerDes port. The switch offers local and remote management capabilities, providing easy access and configuration of the device.

This switch utilizes AVB technologies to identify and reserve network resources for AVB traffic streams and precise streaming capabilities to for time sensitive multimedia streams such as digital audio, video to be sent over Ethernet network with low latency and robust quality of service.

The device is optimized for ultra-low power performance with Energy Efficient Ethernet reducing the power by 50% during periods of low data activity. It also supports wake-on-LAN and wake of frame event detection allowing an attached CPU to enter sleep mode achieving even greater system power savings.

BRIGHTLANE™ 88EA6352 automotive Ethernet switch



PRODUCT BRIEF

Key features

Features	Benefits
IO interfaces	– 5x IEEE 10/100/1000BASE-T/TX/T – 2x RGMII / MII/RMII/GMII – 1x SerDes/SGMII – MDI interface – Configurable GPIOs – Single dual color LED support – 25 MHz external clock source
Package characteristics	– 128-pin LQFP package, 0.4 mm pitch, 14 x 14 mm
EEPROM	– Supports 4-wire 93C56/93C66 or 2-wire 24C01/24C02/24C04 to configure attached EEPROMs and slave configurations

Key features

- Support Audio/Video Bridging (AVB)
- AEC-Q100 grade 3 qualified
- PHYs support Energy Efficient Ethernet (EEE) as per 802.3az
- TCAM-based Policy Control List (PCL) engine
- Wake-on LAN and wake on frame detection
- MAC SA based 802.1X authentication

Target applications

- Gateway
- In-vehicle infotainment
- Body domain controller

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