Ethernet AVB IP Datasheet

Ethernet AVB

Overview

- The Renesas Ethernet AVB IP provides interface features for End Station in Ethernet Audio Video Bridging networks.
- This IP includes an Ethernet controller that conforms to the definition of the MAC layer for Ethernet in the IEEE 802.3 standard. And this IP has a dedicated direct memory access controller for transferring transmitted Ethernet frames to and received Ethernet frames from respective storage areas in the memory at high speed.
- This IP has standard and easy interface. You can easily implement this IP to your system.
- This IP is silicon proven and has been verified with many commercial-release product. You can make use of this IP with a sense of security to your system.

Key Features

- Flow control conforming with the IEEE 802.3x standard
- Transmission and reception of Ethernet (IEEE 802.3) frames
- Supports transfer at 100 Mbps and 1000 Mbps
- Supports interface conforming to IEEE802.3 PHY GMII and MII
- Supports IEEE802.1BA, IEEE802.1AS, IEEE802.1Qav and IEEE1722 function
    - ingress/egress time-stamping for gPTP message
    - forwarding and queuing for time-sensitive streams
    - AVTP presentation time for 1722 packets
- Magic packet detection
- APB interface for register access
- AXI interface for DMA

Block diagram

Renesas Electronics Corporation
www.renesas.com