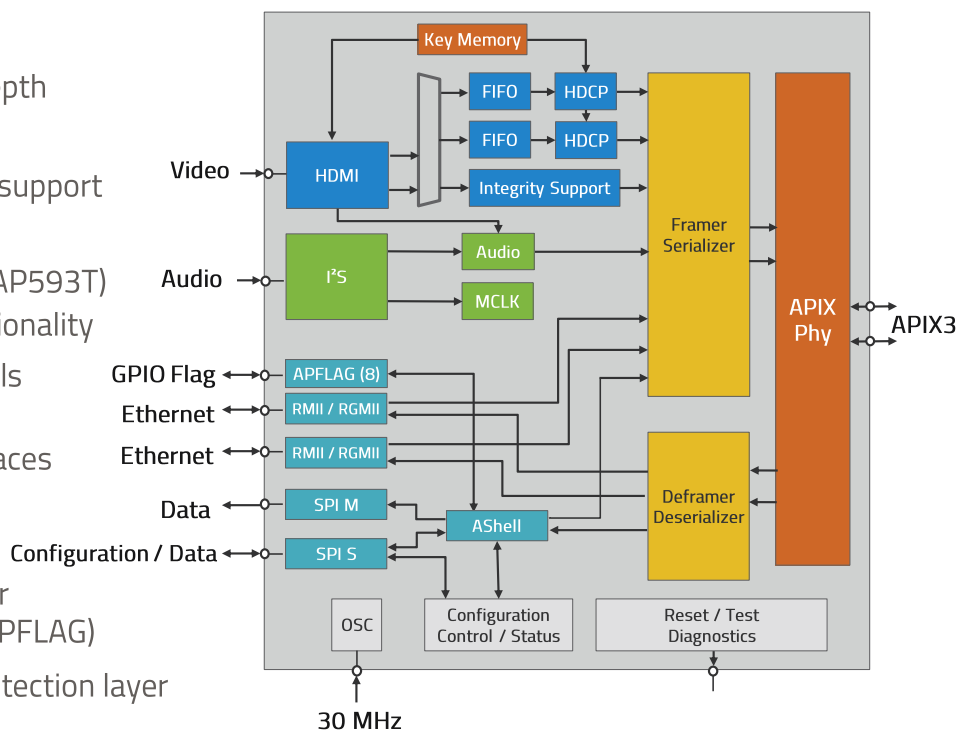


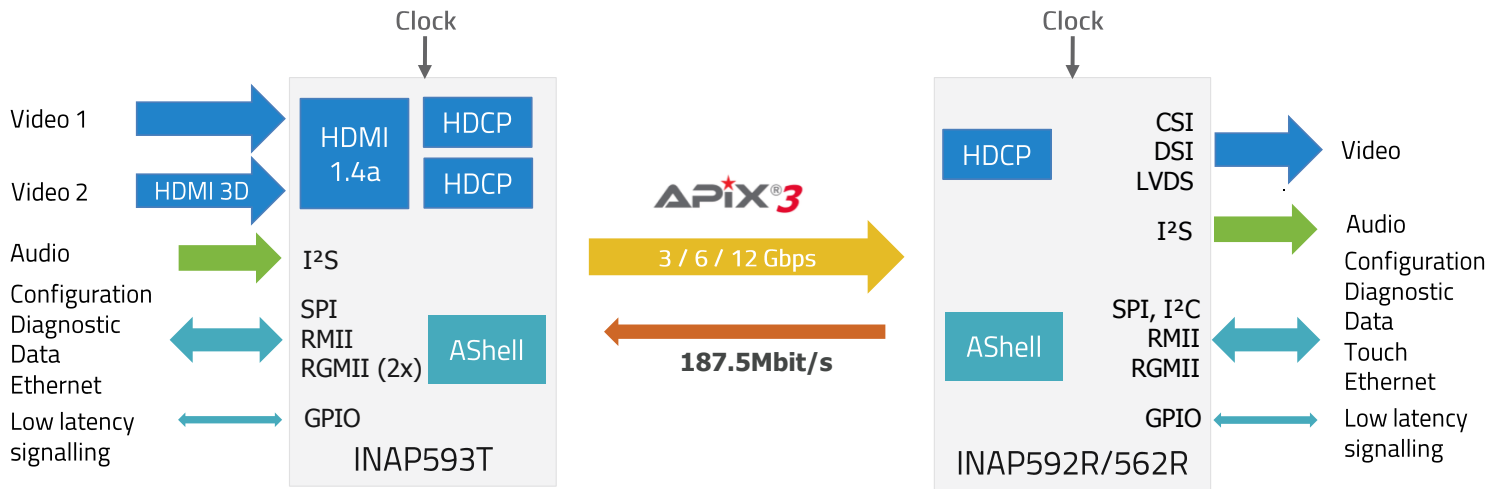
# INAP563T, INAP593T

## APIX3 Transmitter w. HDMI video input

### FEATURES

- Physical Layer
  - 6, 3 or 1.5 Gbps downstream
  - Support of 12 Gbps dual lane link
  - 6+6 Gbps, 3+3 Gbps, 1.5 + 1.5 Gbps
  - 187.5Mbps upstream
  - Automatic link training
- Supports STP (Shielded Twisted Pair), QSTP or Coax cables
- Support to drive 2 receivers simultaneously
- Two Video Channels
  - Uncompressed video transmission up to 3840x1080 30bit @60Hz or 2x 2880x1080 24bit @60Hz
  - Supports 18/24 or 30-bit color depth
  - Video integrity support
- HDMI 1.4a video interface with 3D support
  - Support for DP++ connectivity
- 2 HDCP 1.4 encryption engines (INAP593T)
  - Source encryption, repeater functionality
- Full-duplex communication channels for Data, Ethernet or GPIO
  - 2 MII/RMII/RGMII Ethernet interfaces
  - 10/100 Mbps support
  - SPI data interfaces
  - Up to 4 GPIO Flags per receiver for protected signaling over AShell (APFLAG)
- Embedded AShell protocol data protection layer
- Support for Audio over HDMI
  - I<sup>2</sup>S Audio interface
  - Supports 16/24/32 Bit word length
  - Supports up to 192kHz sampling
  - TDM support for up to 8 channels
- Diagnostic Features:
  - Built-in PRBS generator and checker
  - Continuous link monitoring
- APIX2 compatible





### TEMPERATURE QUALITY

- -40°C to +105°C
- AEC -Q100

### DESERIALIZER

- INAP562R, INAP592R
- INAP375R, INAP395R
- Indigo 2 / Indigo 3 / Indigo 3L (Socionext)

### APPLICATIONS

- Infotainment Systems
- Head Units
- Head Up Displays
- Multimedia Gateways
- Central Information Displays
- Instrument Clusters
- Rear-Seat Entertainment Systems
- Console Display

Part Number	Package	Pack Size	HDCP
INAP563TAQ-T	151 aQFN	176 / Tray	
INAP563TAQ-R2	151 aQFN	2000 / Reel	
INAP593TAQ-T	151 aQFN	176 / Tray	yes
INAP593TAQ-R2	151 aQFN	2000 / Reel	yes