

Comprehensive
ARINC 818 Solutions.....

ARINC 818 Recorder





ARINC 818 DVR is a multi-channel record/playback system that accepts any form of ARINC818 video input with different resolution & refresh rate. The received ARINC818 video stream is encoded with the assist of an on-chip H.264/H.265 video codec engine which is capable of performing simultaneous compression and decompression of video streams and the encoded video is stored in SSD hard drive.

Applications:
Video Recorder
Flight/Aircraft Recorder

HIGHLIGHTS

- Accepts ARINC 818 video stream at different resolution & refresh rate
- Quick ARINC 818 ICD customization as per customer requirement
- Link Rate Supported
FC 1x, 2x, 3x, 4x
- Multi-Standard Encoding Support
ISO MPEG-4 Part 10: Advanced Video Coding (AVC) / ITU H.264
ISO MPEG-H Part 2: High-Efficiency Video Coding (HEVC) / ITU H.265
- ARINC 818 Recording & Playback support

SPECIFICATIONS

Transmission Medium Supported
Optical or 75-ohm Copper Input
Video Resolution Supported
Progressive Video Streams up to Full HD @60fps

Recording and Playback:

1x SATA M.2 Connector to plug SSD and store video data as well as playback recorded video stream via HDMI

Interface List

1x 10/100/1000M Ethernet
1x PCIe x2 link on M.2 M keyed Connector*
1x USB3.0 via M.2 Connector*
1x 4G module via M.2 connector (USB interface) *
1x mini PCIe form factor SATA via M.2 connector*
1x Debug UART via Micro-AB Connector

On Board Interface

2x HDMI 2.0 input via standard HDMI connector
2x HDMI 2.0 output via standard HDMI connector
2x SFP support up to 10Gbps
1x 5x8 Monochrome Character LCD
20x GPIOs via GPIO header
1x Reset Switch
5x General Purpose Switch

FPGA

Xilinx's Zynq Ultrascale+ MPSoC with FBVB900 package
16 Channels GTH Transceivers up to 16.3Gbps
4 Channels GTR Transceivers up to 6Gbps

Memory

8GB eMMC Flash (Upgradable)
64bit, 8GB PS DDR4 with ECC
6bit, 4GB PL DDR4

PCB & Enclosure Details

PCB Dimensions:110mm x 90mm
Heat sink: Custom Aluminum Enclosure
Cooling method: Conduction Cooling
Size: <120mmx100mmx50mm

Power Supply

12V, 5A DC via standard Power Jack
9V, 3A DC via Type-C connector
2x SFP support up to 10Gbps
1x 5x8 Monochrome Character LCD
20x GPIOs via GPIO header
Operating temperature: Commercial & Industrial Grade

*Note : Interface is provide in single M.2 connector and at a time only one interface can be supported.

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iW ARINC 818 Recorder

The device can be ordered online from the iWave website:
<https://www.iwavesystems.com/product/arinc818-recorder/>
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<https://www.iwavesystems.com/business-partners/>

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