

The ARINC 818-3 IP core offers higher data rates and encoding for high-resolution real-time avionics video. ARINC818-3 standard provides 64B/66B schemes to support high-speed ARINC applications having data rates up to 28Gbps. Display emulation for testing, low latency guidelines, and fixing typographic errors to previous versions was new in this specification.

## Applications

- Avionics Cockpit Display System like HUD/MFD
- Mission Computer
- Video Concentrator etc.

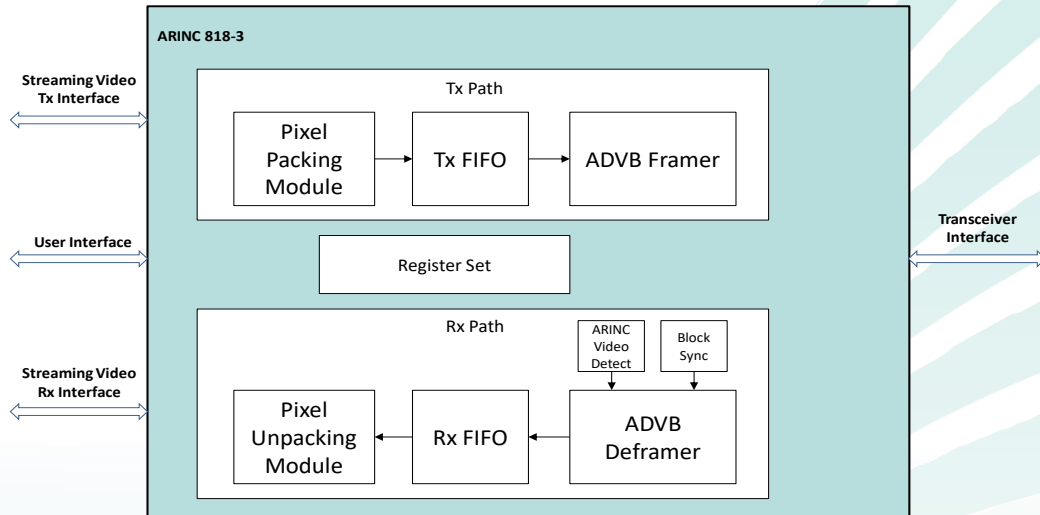
## Highlights

- Provides 64B/66B encoding for extreme high-speed ARINC 818 applications: 14.025 Gb/s, 21.0375 Gb/s, and 28.05 Gb/s.
- ARINC 818-3 adopts fiber channel for 64B/66B encoding and 256B/257B encoding
- We offer ARINC 818-3 protocol embedded conversion cards

## Specifications

- IP Compliant to ARINC818-3 specification
- Video TX and RX interface: Simple Streaming Interface
- Transmission Medium: Optical
- Link Rate Supported: 16x, 24x & 32x
- Video Resolution Supported: Resolution up to 4K @ 60fps
- Video Type: Progressive Scan, Interlaced
- Pixel Format supported: Monochrome, RGB, YCbCr, RGBA
- Configurable Pixel Aspect ratio supported
- Configurable Frame Rate supported
- Packing Table Number supported
  - 8-bit Components, four components per transmission word
- Pixel Array Order supported
- Left to Right, Top to Bottom
- Line Synchronous Mode supported

## iW ARINC 818-3 IP block diagram



### Deliverables

- RTL source code or Netlist
- IP example design
- IP datasheet
- Integration Manual

### Licensing Options

- Non-Transferable: Single Project/Product Netlist License – Single Site
- Non-Transferable: Multi Project/Product Netlist License – Single Site
- Non-Transferable: Single Project/Product RTL Source Code License – Single Site
- Non-Transferable: Multi Project/Product RTL Source Code License – Single Site

### Technical Support

iWave provides comprehensive support during your system integration & validation.

- The Client may open a new support incident by emailing to a technical support engineer
- iWave's response time shall be within 24 hours of the initial call, with the details of the action plan to resolve
- Support assistance shall be delivered by telephone, email and/or remote assistance via a web meeting
- iWave shall provide remote debugging support irrespective of the time zone/ region

iWave System Technologies, established in 1999, focuses on Product Engineering Services involving Embedded Hardware, Software & FPGA. The company designs and develops cutting edge products and provides the FPGA programable design solutions. iWave has been a leader in providing the robust and comprehensive IP cores and turnkey FPGA design services.

### iW ARINC 818-3 IP

The IP can be ordered online from the iWave Website <https://www.iwavesystems.com/product/arinc-818-3-ip-core/>  
Or from our Local Partners in your region <http://www.iwavesystems.com/about-us/business-partner.html>

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