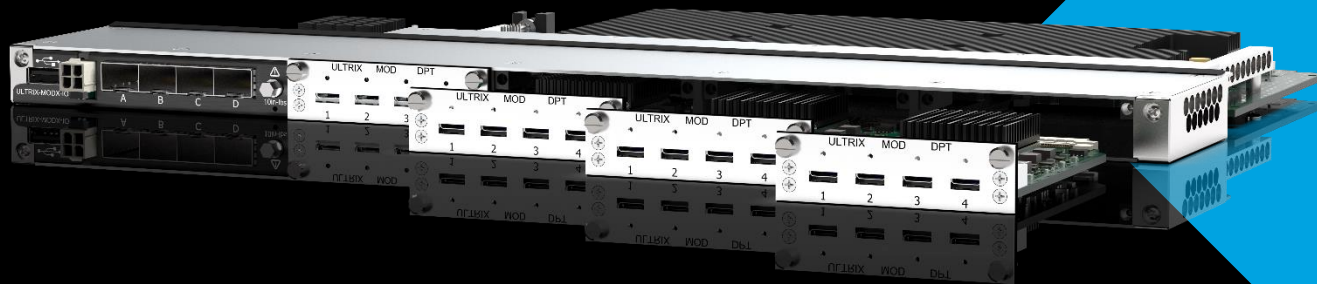# Ultrix

ULTRIX-MOD-DPT

Ultrix DisplayPort Outputs

Modern workflows demand the flexibility to support a variety of I/O formats. In professional production environments, native formats such as ST 2110, SDI, or NDI are standard, while common displays, display processors and other devices often rely on A/V formats like DisplayPort. Traditionally, bridging these domains required intermediate converters. Enter the ULTRIX-MOD-DPT - an output module for Ultrix designed to drive DisplayPort devices, such as monitors and display processors, directly, eliminating the need for external converters. This reduces cabling and complexity while offering a simplified and more efficient workflow.
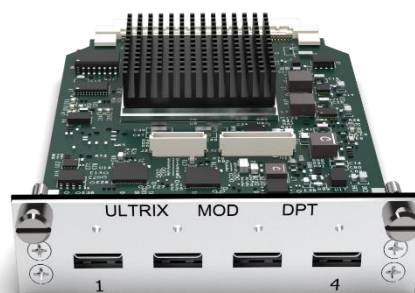
ULTRIX-MODX-IO

The ULTRIX-MODX-IO is an I/O card for Ultrix that offers enhanced flexibility. By accommodating up to four ULTRIX-MOD series sub-modules featuring various I/O types and processing functionality, it allows for fine I/O granularity and maximum I/O utilization.

ULTRIX-MOD-DPT – Native DisplayPort Output for Ultrix

The ULTRIX-MOD-DPT is a sub-module for ULTRIX-MODX-IO that provides four DisplayPort 1.4 outputs via USB-C connectors operating in DisplayPort Alternate mode. It supports applicable Ultrix licensable features such as Ultriproc and Ultriscape. Designed to work alongside any other ULTRIX-MOD modules and Ultrix I/O cards, it scales without limitation within the installed Ultrix frame's capacity. Support anywhere from a few to many DisplayPort outputs, as your application needs.
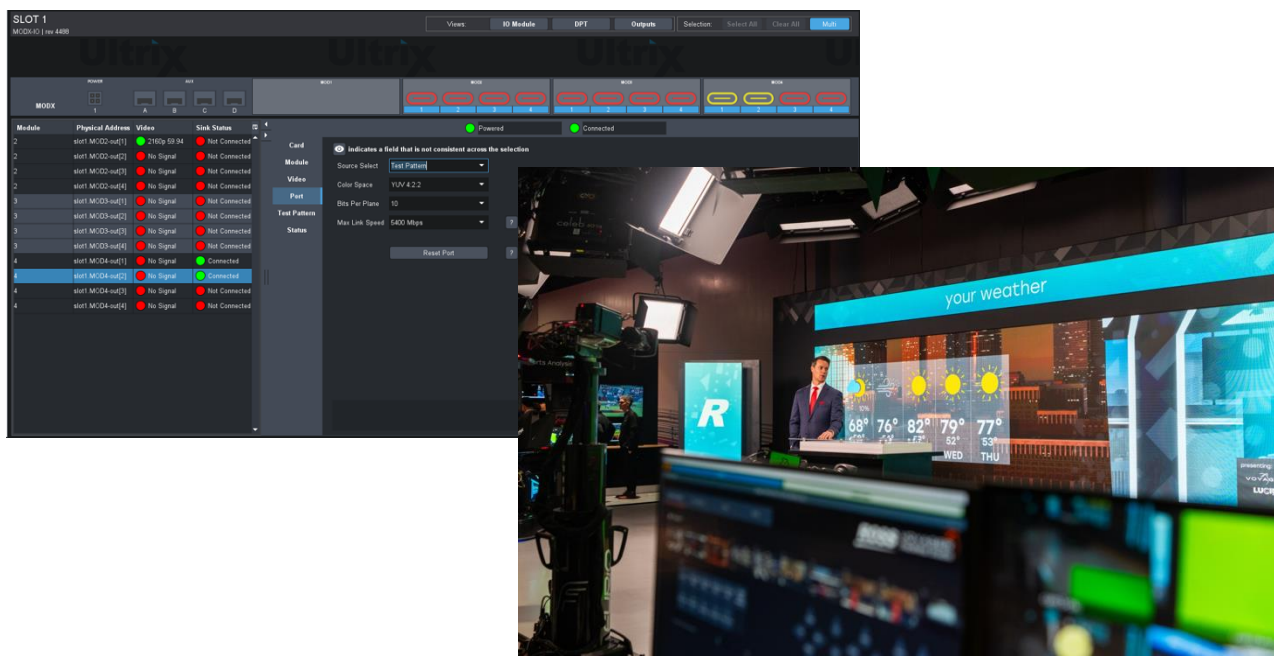
Ultrix

From small applications like driving displays with any input source or multiviewer, to powering advanced display processors for the largest and most complex LED configurations, the ULTRIX-MOD-DPT delivers the functionality needed to handle any scenario.

Features

- Colorspace Conversion: Supports YUV 4:2:2 and RGB 4:4:4, ensuring compatibility with the diverse input needs of display processors and other devices.
- In addition to DisplayPort, USB-C DisplayPort Alternate Mode supports connections to HDMI, DVI, and even analog RGB devices using widely available adapters.
- Secure and Hassle-Free Connections: USB Type-C connectors are reversible and secure. Threaded holes are furnished on the ULTRIX-MOD-DPT to support USB-C connectors with top-screw locking.
- USB-C power delivery supports active adapters, active cables, and active copper or optical extension cables.
- Includes a built-in test pattern generator with selectable formats for easy setup and testing.
- DisplayPort outputs function like any other Ultrix output, enabling familiar control and easy routing of compatible signals.
- Configure and monitor all parameters through DashBoard, with detailed insights on routed signal status and the connected devices on each port.

Technical Info

Supported Hardware

- Ultrix Frames: FR1-NS, FR2-NS, FR5, FR5-NS and FR12
- Ultrix I/O Cards: ULTRIX-MODX-IO

Interfaces

- 4 x USB-C operating in USB 3.1 DisplayPort Alternate Mode
- DisplayPort 1.4
- Provision for top screw locking USB-C connectors
- Supports hot-plug detection

Video/Audio Support

- Formats
    - 720P 50/59.94/60
    - 1080P 23.98/24/25/29.97/30/50/59.94/60
    - 2160P 23.98/24/25/29.97/30/50/59.94/60
- Audio not supported

Colorspace, Chroma Subsampling, Bit Depth

- Selectable YUV 4:2:2 or RGB 4:4:4
- Selectable 8 or 10 Bit
- HDR: Outputs HDR colorspace / dynamic range but does not generate HDR metadata. For HDR display applications, the connected device should support manually setting the required HDR standard.

Monitoring

- Monitoring and control via Ross DashBoard software
- EDID retrieval and display from connected devices
- Connected device status
- Data lane count, link rate

Ordering

ULTRIX-MOD-DPT	DisplayPort sub-module for ULTRIX-MODX-IO. 4x DisplayPort outputs via USB-C, per sub-module.