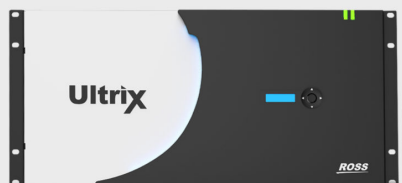


ULTRIX

ROSS

Ultrix Software Defined Routing Platform

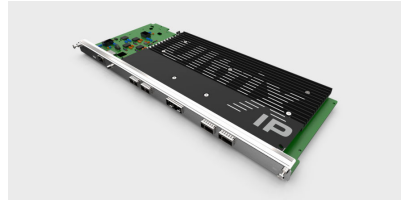
The award winning Ultrix 12G Router is the ultimate routing, multiviewer, and signal processing platform for Studios, OB Vans, and Flypacks. As the only software defined platform, customers realize significant cost, space, and power efficiencies with unparalleled flexibility and agility, especially relative to competitive hybrid routers.



Cena:

Kategorie: [Video](#), [Broadcast](#), [Routery](#)

GALLERY IMAGES



OPIS

Software Defined

Easily add new features through additional software licenses. No additional hardware required.

12G Ready

Ultrix natively supports 12G throughout the entire chassis. This means it's ready for UHD production when you are, without replacing any hardware or losing capacity.

IP-Enabled

New version of the latest Ultrix-FR5 routing/AV processing platform that adds IP I/O to the already impressive feature set of this disruptive, 'Swiss Army knife' infrastructure solution.

Integrated Design

The Ultrix 12G Router is infrastructure in a box. Video/audio routing, multiviewers, audio processing, frame synchronizers, clean/quiet switching, UHD gearboxing and more all unified

in one single chassis.

Save Money

Because of its size, base feature set, and software capabilities, owners save significant money on upfront capital costs. Additionally, the advanced architecture provides significant ROI in terms of power, cooling, shipping, and space costs.

Pay As You Go

The software defined architecture means you simply buy what you need, when you need it. No need to make critical design decisions upfront, simply add appropriate functions when they are required.

Ultrix 12G Router Overview Video

The Ultrix 12G Router provides a compact and powerful combination of routing, multi-viewers, audio processing, and control, without requiring special hardware as advanced features can be added at any time via simple software licensing.

Features

Rich Multiviewer Capabilities

Up to 24 Independent multiviewer heads in a single 5RU chassis. Each head supports up to 100 pips. Completely independent and individually controllable providing superior flexibility.

Powerful Audio Processing and Routing Fabric

Up to 3kx3k audio routing and processing fabric comes standard with Ultrix. Up to 2kx2k embedded, and 1kx1k discrete audio supported. Route, process, and configure down to a mono channel, regardless of I/O.

Robust Hardware

The multiple patent awarded hardware design is based on attention to little details. From the sophisticated thermal management, locking card guides and edge connections, advanced internal smart fabric and more, Ultrix 12G Router has been designed to perform in the harshest environments.

Ultrix-FR5 Infographic

The ability to change and update functionality via software license translates to significant cost, space, and power efficiencies with unprecedented flexibility and agility.

Ultrix HDB-IO Cards

The core I/O board for the Ultrix family provides unparalleled power and performance for signal routing, processing, and multiviewers for baseband audio, as well as video signals from 270Mb/s to 12Gb/s:

- **12G capable on every port**- True single link 12G support is capable on every port of the frame with no loss of I/O
- **Full TDM audio processing standard**- Deembed up to 16 channels of audio on every video input, embed up to 16 channels of audio on every output. In addition, discrete audio is available via MADI. Route, adjust gain, adjacent channel sum, invert, and tone insertion on outputs, all down to a mono channel level.
- **Clean/Quiet Switching on Every output**standard- Every output on Ultrix supports the ability to do true, glitch free/pop free clean/quiet switching. Simply enable on the outputs that require that functionality.
- **Enhance performance via Software Licensing**- Add framesyncs (Up to 3G) on every input. Add Multiviewer capability on up to three Outputs per board. All this simply by purchasing the appropriate licenses. No new hardware or special crosspoints required.

Ultrix IP-IO Card

Ultrix IP-IO cards introduce IP streams to the Ultrix platform, while maintaining all the

powerful features and licensing capabilities of the HDB-IO cards:

- **Hybrid,SDI or IP, build what you need**- With the addition of Ultrix- IP cards, you don't need to choose between an SDI or IP platform, Ultrix does both. This card provides IP connectivity in addition to the standard SDI count of the Ultrix-HDB-IO card to allow you to build or migrate what you need, when you need it.
- **Keep the Power**- With Ultrix-IP-IO, you get the ability to migrate to the emerging SMPTE-2110 transport standard, all while keeping the power and performance required for your facility. Ultrix-IP-IO provides the capability to do such things as:
 - **IP multiviewers**
 - **IP clean/quiet switching**
 - **IP framesyncs**
 - **IP audio embedding/deembedding**

Ultrix SFP-IO Cards

The latest board for the Ultrix family provides unparalleled power and performance for signal routing, processing, and multiviewers for baseband audio, as well as video signals from 270Mb/s to 12Gb/s using modular SFP transceiver cages:

- **Flexible** - Choose from a mix of fiber, coax, and HDMI SFP's for easy integration with a wide variety of signal interfaces
- **Full TDM audio processing standard** - De-embed up to 16 channels of audio on every video input and embed up to 16 channels of audio on every output. In addition, discrete audio is available via MAD1. Route, adjust gain, adjacent channel sum, invert, and tone insertion on outputs, all down to a mono channel level.
- **Clean/quiet switching on every output standard** - Every output on Ultrix supports the ability to do true, glitch free/pop free clean/quiet switching. Simply enable on the outputs that require that functionality.
- **Enhance performance via Software Licensing** - Add framesyncs (Up to 3G) on every input, with 12G framesyncs available on up to 3 inputs per slot. Add Multiviewer capability on up to three outputs per board. All this simply by purchasing the appropriate licenses. No new hardware or special crosspoints required.

Applications

This product can be used as part of the following Smart Production Solutions:

- Sports & Live Venue
- Government
- News
- Corporate
- House of Worship
- Education
- Mobile

Specifications

Ultrix' hardware is designed to guaranty the highest level of resilience and stability using the best available components.

| PHYSICAL DIMENSIONS | 1RU | 2RU | 5RU |
|------------------------------------|---|---|------------------|
| Width | 17.5" | 17.5" | 17.5" |
| Depth | 7.9" | 7.9" | 7.9" |
| Height | 1.74" | 3.48" | 8.7" |
| Frame Weight (approx) | 9 lbs (4.08 kg) | 12lbs (5.44 kg) | 6.35 kg (14 lbs) |
| I/O Card Weight (approx per board) | 3 lbs (1.36 kg) | 3 lbs (1.36 kg) | 3 lbs (1.36 kg) |
| INVENTORY | 1RU | 2RU | 5RU |
| Video Matrix Size (max) | 36×36 | 72×72 | 160×160 |
| Default I/O Slots | 1 (16×16 HD BNC + 2 AUX I/O Ports) | 1 (16×16 HD BNC + 2 AUX I/O Ports) | None |

| INVENTORY | 1RU | 2RU | 5RU |
|--|---------------------------------------|---------------------------------------|---|
| Optional I/O Slots using ULTRIX-HDB-IO | 1 (16×16 HD BNC + 2AUX I/O Ports) | 3 (16×16 HD BNC + 2 AUX I/O Ports) | 9 (16×16 HD BNC + 2AUX I/O Ports) slots 1-8 FLEX slot 16×16 HD BNC only |
| Optional I/O Slots using ULTRIX-IP-IO | 1 (x4 25G SFP28 + 2 SFP I/O Ports) | 3 (x4 25G SFP28 + 2 SFP I/O Ports) | 9 (x4 25G SFP28 + 2 SFP I/O Ports) |
| Optional I/O Slots using ULTRIX-SFP-IO | 1 (16 SFP ports + 2AUX I/O Ports) | 3 (16 SFP ports + 2AUX I/O Ports) | 9 (16 SFP ports + 2AUX I/O Ports) slots 1-8; FLEX slot 16 SFP ports only |
| Audio Matrix Size (with Optional MADI SFP's) | 768×768 | 1536×1536 | 3456×3456 |
| Ultriscape MV Head License per Slot | 3 SDI or 2 IP | 3 SDI or 2 IP | 3 SDI or 2 IP |
| Maximum Ultriscape MV heads per System | 6 SDI or 4 IP | 12 SDI or 8 IP | 27 SDI or 18 IP |
| UHD licenses per Frame | 1 | 1 | 1 |
| Maximum UHD Gearboxes per System | 6 in/6 out | 12 in/12 out | 27 in/27 out |
| Maximum number of 3Gb/s input frame syncs per system | 36 | 72 | 160 |
| Maximum number of 12Gb/s input frame syncs per system | 6 | 12 | 27 |
| Maximum number of 12Gb/s clean/quiet outputs per system | 36 | 72 | 160 |

| OTHER | 1RU | 2RU | 5RU |
|-------------------------------------|------------------|------------------|--------------------|
| PSU (default) | 1 external brick | 2 external brick | 1RU external frame |
| Optional Redundant PSU (additional) | 1 external brick | 2 external brick | 1RU external frame |
| Ultrapower support | Optional | Optional | Optional |
| Fan Module | 1 | 2 | 5 |

| INPUT SPECIFICATION-ULTRIX-HDB-IO | 1RU | 2RU | 5RU |
|--|------------|---|------------|
| Standard Input | | HD BNC | |
| Signal Type | | SDI Formats: 270 MB/s 1.5 GB/s 3.0 GB/s 12 GB/s | |
| Impedance | | 75 Ohm | |
| Max Input Level | | 880 mV | |
| Return Loss | | Per SMPTE 2082-1 | |
| Equalization | | UHD: 60m 3G: 180m HD: 200m SD: 400m | |
| SFP Aux Connector | | optional | |

| OUTPUT SPECIFICATION-ULTRIX-HDB-IO | 1RU | 2RU | 5RU |
|---|------------|---|------------|
| Standard Output | | HD BNC | |
| Signal Type | | SDI Formats: 270 MB/s 1.5 GB/s 3.0 GB/s 12 GB/s | |

| OUTPUT SPECIFICATION- ULTRIX-HDB-IO | 1RU | 2RU | 5RU |
|--|------------|---|------------|
| Impedance | | 75 Ohm | |
| Amplitude | | 800mV +/- 10% | |
| Rise & Fall Time | | 270 MB/s: 400-800ps 1.5 & 3GB/s: < 135ps 12GB/s: <45ps | |
| DC Offset | | 0.0V +/- 10% | |
| Overshoot | | < 10% | |
| Jitter | | <0.2UI Alignment (up to 3G) <0.3 UI Alignment (12G) <.2UI Timing (up to 270M) <1UI Timing (1.5G) <2UI Timing (3G & 12G) | |
| Return Loss | | Per SMPTE 2082-1 | |
| SEP Aux Connector | | Optional | |
| EMBEDDED AUDIO SPECIFICATIONS | | | |
| | 1RU | 2RU | 5RU |
| Audio Channels per I/O | | 16 | |
| CARD SPECIFICATION-ULTRIX-IP-IO | | | |
| | 1RU | 2RU | 5RU |
| Standard Output | | (4) 25GE SFP28 | |
| Video Streams per Card | | UHD: 4+4 redundant, 8 non-redundant 6G: 4+4 redundant, 8 non-redundant 3G/HD: 16+16 redundant, 16 non-redundant | |
| Video Format Support | | 720p: 25/ 29.97/ 30/ 50 / 59.94 / 60 1080i 50 / 59.94 / 60 1080p 25/ 29.97/ 30/ 50 / 59.94 / 60 2160p 25/ 29.97/ 30/ 50 / 59.94 / 60 | |

**CARD SPECIFICATION-ULTRIX-
IP-IO**

| | 1RU | 2RU | 5RU |
|-------------------------------|------------|---|------------|
| IP Transport Standard Support | | SMPTE ST 2110 suite, including: - 10, System Timing and Definitions - 20, Uncompressed Active Video - 30, PCM Digital Audio VSF TR-03 AES67 | |
| System Timing and Reference | | PTP Slave (SMPTE 2059, AES67 and IEEE-1588 default profiles) | |
| Control and Setup | | NMOS IS-04 and IS-05 for AIMS-compliant discovery, registration and connection control EmBER+ discovery, registration and connection control from popular 3rd-party systems Provisioning and monitoring via DashBoard and/or our published JSON API | |

**INPUT / OUTPUT
SPECIFICATION-ULTRIX-SFP-IO**

| | 1RU | 2RU | 5RU |
|---------------------|---|---|------------|
| Number of SFP cages | 16 Bidirectional SFP cages plus 2 AUX ports | | |
| Signal Type | | SDI Formats: 270 Mb/s 1.5 Gb/s 3.0 Gb/s 12 Gb/s | |
| Compliance | | MSA/Non MSA configurable | |
| I/O specification | | See SFP Manufacturer spec sheet for I/O specification | |
| Frame Support | | ULTRIX-NS and ULTRIX-5RU only | |