SCORPION Packaged Solutions

Media processing, conversion, and transport

SCORPION packaged products provide scalable solutions for media processing and bulk compression services. If the desired solution requirements differ slightly in density or signal type from one of the available packaged SCORPION products, a customizable solution is available using individually selected SCORPION and MIO products. Our local sales representatives and solution architects can help realize a customized SCORPION solution based on the processing or transport requirements.

Scalable Solutions

SCORPION packaged solutions come in 3 available scalable form factors. SCORPION-2RU, SCORPION-18 series, and SCORPION-6F allow for selection of the quantity of signals required, as well as an option for low noise type environments (SCORPION-6F).





SCORPION-2RU

- · Highest density solution
- · Redundant internal power and control
- SDI, IP and hybrid capable
- Integrated IP fabric and crosspoint switch
- 1G to 800Gbps network connectivity

For more information about SCORPION-2RU please visit the device webpage.





SCORPION-18 Series

- · High density solution
- · Redundant external power and control
- SDI, IP and hybrid capable
- Integrated crosspoint switch with IP fabric or processing FPGA
- 1G to 200Gbps network connectivity

For more information about SCORPION-18 Series please visit the device webpage.



SCORPION-6F

- · Mid density solution
- Redundant external power and control
- SDI, IP and hybrid capable
- Integrated crosspoint switch and processing FPGA
- 1G to 50Gbps network connectivity

For more information about SCORPION-6F please visit the device webpage.

Media Processing, Conversion, and Transport Solutions

SCORPION packaged solutions focus on the most commonly used functions in broadcast ecosystems, media processing and transport. Media processing and conversion includes the standard feature set used in video conditioning and normalization while the transport packages focuses on both high bandwidth and low bandwidth contribution of video signals.



SCORPION Packaged Solutions

Media processing, conversion, and transport

Media Processing and Conversion

- 12G/3G/HD/SD signal support
- Frame synchronization
- Up/down/cross conversion
- HDR conversion using LUTs
- · Color correction and video processing
- · Audio level, up/downmix processing
- SDI, ST2110, and ST2022-6/7 support

12GPROC Package Density

- PKG-SCORP-2RU-12GPROC = 18 paths
- PKG-SCORP-X18-12GPROC = 8 paths
- PKG-SCORP-6F-12GPROC = 2 paths

3GPROC Package Density

- PKG-SCORP-2RU-3GPROC = 36 paths
- PKG-SCORP-X18-3GPROC = 16 paths
- PKG-SCORP-6F-3GPROC = 6 paths

JPEG-XS

- · Low latency, high quality contribution
- TR07 with roadmap TR08
- 12G/3G/HD-SDI signal support
- FEC (2022-1) and ST2022-7 support
- Quad-link 2SI SDI support for UHD
- Decoder frame sync or bypass
- Non-package solution for ST2110 IO

TR07 Package Density

- PKG-SCORP-2RU-TR07 = 72 paths
- PKG-SCORP-X18-TR07 = 32 paths
- PKG-SCORP-6F-TR07 = 6 paths

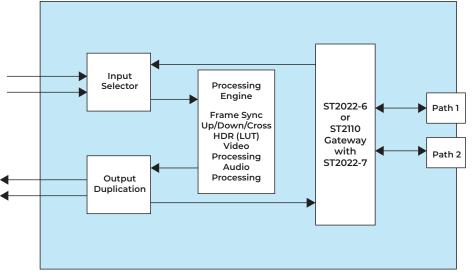
HEVC/H264

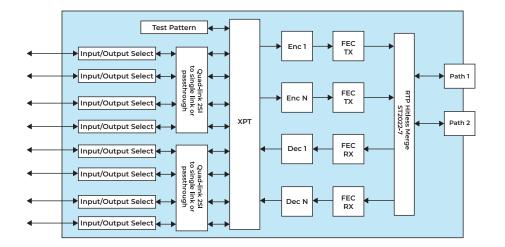
- Low bandwidth contribution
- Low latency, high quality contribution
- HEVC or progressive H264
- 3G/HD-SDI signal support
- TS with ST2022-7 or SRT
- Decoder frame sync or bypass
- Non-package solution for ST2110 IO

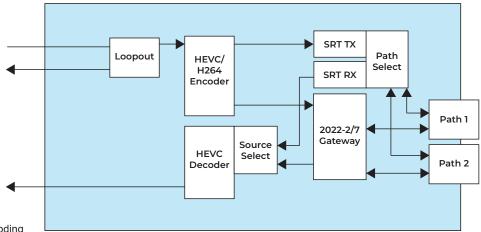
HEVC/H264 Package Density

- PKG-SCORP-2RU-HEVC = 36 paths
- PKG-SCORP-X18-HEVC = 16 paths
- PKG-SCORP-6F-HEVC = 6 paths

Note: increased density for 420 8 bit encoding







SCORPION Packaged Solutions

Media processing, conversion, and transport



Miniature IO (MIO) Processors



The processor element for each of the SCORPION packaged solutions leverages the same miniature input/output (MIO) FPGA processor MIO-BLADE-Z21. For more information about MIO-BLADE-Z21 and available APP/personalities, please visit the device webpage.

Ordering Information

SCORPION Pre-Packaged Solution Ordering Items

12G Processing and Conversion Packages

PKG-SCORP-2RU-12GPROC 2RU Package for 18 paths of 12G/3G/HD video processing. Redundant power and control included, QSFPs not included.

PKG-SCORP-X18-12GPROC 1RU Package for 8 paths of 12G/3G/HD video processing. Redundant control included, QSFPs and power supplies not included.

PKG-SCORP-6F-12GPROC Throwdown package for 2 paths of 12G/3G/HD video processing. Redundant control included, SFPs and redundant power supplies not included.

3G Processing and Conversion Packages

PKG-SCORP-2RU-3GPROC 2RU Package for 36 paths of 3G/HD/SD video processing. Redundant power and control included, QSFPs not included.

PKG-SCORP-X18-3GPROC 1RU Package for 16 paths of 3G/HD/SD video processing. Redundant control included, QSFPs and power supplies not included.

PKG-SCORP-6F-3GPROC Throwdown package for 6 paths of 3G/HD/SD video processing. Redundant control included, SFPs and redundant power supplies not included.

JPEG-XS Transport Packages

PKG-SCORP-2RU-TR07 2RU Package for 72 paths of 12G/3G/HD JPEG-XS compression. Redundant power and control included, QSFPs not included.

PKG-SCORP-X18-TR07 1RU Package for 32 paths of 12G/3G/HD JPEG-XS compression. Redundant control included, QSFPs and power supplies not included.

PKG-SCORP-6F-TR07 Throwdown package for 12 paths of 12G/3G/HD JPEG-XS compression. Redundant control included, SFPs and redundant power supplies not included.

HEVC/H264 Transport Packages

PKG-SCORP-2RU-HEVC 2RU Package for 36 paths of 3G/HD HEVC/H264 compression. Redundant power and control included, QSFPs not included.

PKG-SCORP-X18-HEVC 1RU Package for 16 paths of 3G/HD HEVC/H264 compression. Redundant control included, QSFPs and power supplies not included.

PKG-SCORP-6F-HEVC Throwdown package for 6 paths of 12G/3G/HD HEVC/H264 compression. Redundant control included, SFPs and redundant power supplies not included.