



SE-4100/4150

AVC Standard Definition Video Encoder



High Performance MPEG-4 AVC Standard Definition Receiver Encoder for VBR and CBR Applications

Highlights Include:

- A real-time, full resolution Standard Definition AVC video encoder
- Support for Main Profile @ Level 3
- Multi-pass CBR encoding
- Input flexibility
 - Baseband SDI
 - IP and ASI inputs
 - Off air RF input (on SE-4150)
- Low power, 1 RU chassis
- Integrated low resolution proxy (PIP)
- Motion Compensated Noise Reduction (MCTF) for enhanced video quality
- Constrained Fidelity (CF-CBR) capped VBR mode
- Statistical multiplexing capability
- Microsoft® Mediaroom™ conformance tested
- Monitoring thumbnail
- Ad insertion support
- Four Ethernet ports
- Digital Turn Around for MPEG-2 inputs
- Down conversion HD to SD (AFD per S2016-1-2007)
- Transcoding AC3 to DD Plus and HE-AAC
- Trace Feature
- Closed Captioning and Parental Control monitoring

- SNMP interface with published MIB
- Web browser interface

For more information regarding any of these features contact your Motorola sales representative.

This standard definition platform combines receiver functions with advanced encoding technology to deliver CBR and VBR video services at exceptionally low bit rates. In addition to supporting baseband video, the compact 1RU platform offers support for analog off air, ATSC digital terrestrial and direct MPEG-2 inputs. The receiver functions dramatically enhance headend architectures, reducing box count, simplifying signal routing and redundancy support.

This IP centric platform delivers flexibility, value and exceptional video quality from its advanced multi-pass encoding system. The rich feature set includes HD upgrade option, support for statistical multiplexing over an IP infrastructure, highly efficient HE-AAC audio plus Constrained Fidelity CBR, a capped VBR mode for IPTV environments.

Additionally, the platform offers a low resolution proxy output stream for program guide or monitoring applications. This Linux based platform offers an ASI option for the SE-4100 and is ideal for demanding CBR and VBR applications.

SPECIFICATION SHEET

SE-4100/4150

TECHNICAL SPECIFICATIONS		Digital Audio Input	
MPEG-4 Features		Signal:	Serial digital AES
Motion Estimation:	Supports P, B & reference B frames 16x16 and 8x8 block sizes 1/4 Pixel motion estimation Weighted prediction All intra 4/16 estimation modes	Connector:	BNC, female
Noise Reduction:	Motion Compensated Temporal Filter (MCTF)	Number:	2
Rate Control:	Multi pass encoding with CBR, VBR, and CF-CBR rate control Dynamic GOP - adaptive B frame Selectable GOP structure	Compressed Stream Output	
Coding:	CABAC entropy coding	Ethernet:	3 Gigabit, 1 10/100, RJ-45
Other:	De-blocking filter	IP:	Unicast or Multicast Main plus PIP on SPTS MPEG-2/UDP/IP
Video Processing		ASI Output:	2 (Optional), BNC, female
Input:	SDI per SMPTE-259M MPEG-2/UDP/IP MPEG-2/ASI	H.264:	MPEG-2 Transport Stream over UDP/IP SCTE35 ad insertion splice points from SCTE104 inputs MPEG-2 input - Digital turn around over UDP/IP
Formats:	625i/50; 525i/29.97	Control and Status	
Embedded Audio:	Per SMPTE-272M 4 stereo pairs	Type:	Browser interface SNMPv2 with published MIB Linux operating system
MPEG-4 Profile:	Main; Level 3 Low resolution proxy (PIP)	Physical	
Receiver Inputs (SE-4150 only)		Width:	18.9" (48cm)
ATSC digital terrestrial		Depth:	15.5" (39.4cm)
NTSC with GCR ghost cancellation		Height:	1RU, 1.75" (5cm)
Audio Processing		Weight:	14 lb
Mode:	MPEG-1 Layer 2 Transcoding from AC3 to DD Plus and HE-AAC HE-AAC (v2) audio encoding Dolby® Digital pass-through Dolby Digital 2.0 (optional 2 stereo pairs) BTSC audio extraction and SAP from NTSC input	Packaged Weight:	20 lb
Ancillary Signal Support		Power:	115-230V (continuous), 47-63Hz
Signals:	L21 EIA 608, EIA 708 closed captioning, Teletext	Power Consumption:	Less than 100W
Digital Video Input		Cooling Air:	Front to rear
Signal:	Serial digital per SMPTE-259M	Temperature:	To 40C
Connector:	BNC, female	Other	
Number:	1	Limited Warranty:	One year
		Compliance:	FCC, CE, UL, RoHS and TUV
		Ordering	
		SE-4100	Shown below
		SE-4100A	ASI output
		SE-4150	RF input
		Ordering Options	
		SE-HD2SD	HD to SD Down Conversion
		SE-AC3xDD+	Transcoding AC3 to DD Plus
		SE-AC3xAAC	Transcoding AC3 to HE-AAC
		SE-DD2	Two stereo pairs Dolby Digital 2.0
		SE-HDU	HD upgrade option
		SE-SDVBR	SD StatmuxIP support

**MOTOROLA**

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