



SE-6601/6601R

Advanced Multi-Format Video Encoder



High Performance MPEG-4 AVC Video Processing Platform

Highlights Include:

- A real-time, full resolution High Definition and Standard Definition AVC video encoder
- Support for MPEG-4 AVC High Profile @ Level 3.1 and 4
- Multi-pass CBR and VBR encoding
- Input flexibility
 - Baseband SDI/HD-SDI/3G-SDI dual link
 - MPEG-2 and MPEG-4 AVC transport over UDP/IP or ASI
 - Off air ATSC RF input (on SE-6601R)
- Low power, 1 RU chassis
- Integrated low resolution proxy (PIP)
- Complementary video pre-processing features
 - Motion Compensated Temporal Filter
 - Adaptive Detail Preservation (ADP)
 - 3D Noise Reduction (3DNR)
- Constrained Fidelity (CF-CBR) capped VBR mode
- Statistical multiplexing capability
- Microsoft® Mediaroom™ certified
- Four independent GigE Ethernet ports
- Ad insertion support
- Digital Turn Around for MPEG-2 inputs
- Audio transcoding
- SNMP interface with published MIB
- Web browser interface

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

The SE-6601/6601R supports HD/SD encoding and transcoding for satellite, cable and IPTV applications. This high performance video processing platform supports MPEG-4 standard definition (SD) and high definition (HD) encoding and transcoding and has been designed to meet future processing demands of both 1080P/50Hz and 1080P/60Hz resolutions using the MPEG-4 format.

The optional dual power supplies reinforce that this platform offers ultimate flexibility for 24/7 delivery operations. Flexible input options simplify headend architectures, reduce box count, increase reliability as well as reduce capital and operational costs. For multi program transport applications there is support for StatmuxIP, Motorola's statistical multiplexing solution for both headend and distributed applications.

Advanced pre-processing support complements the advanced compression algorithms to deliver exceptional video quality. The perceptual video processing (PVP) technology utilizes the patented IPeG™ (Integrated Perceptual Guide) to optimally apply noise reduction and detail preservation. The perceptual mapping algorithm effectively steers the powerful filtering technology to remove random, quantization and impulse noise while conserving the detail that the eye cares most about. The net result is the delivery of better pictures at lower bit rates.

SPECIFICATION SHEET

SE-6601/6601R

TECHNICAL SPECIFICATIONS		Digital Audio Input	
MPEG-4 Features		Signal:	4 Serial digital AES inputs
MPEG-4 Profile:	High Profile Low resolution proxy (PIP)	Connector:	Female DB15HD
Motion Estimation:	Supports P, B & reference B frames 16x16 and 8x8 block sizes 1/4 Pixel motion estimation Weighted prediction	Compressed Stream Output	
Rate Control:	Multi pass encoding with CBR, VBR, and CF-CBR rate control Dynamic GOP Selectable GOP structure	Ethernet:	4 Gigabit, RJ-45
Coding:	CABAC entropy coding	IP:	Unicast or Multicast Main plus PIP on SPTS MPEG-2 / UDP / IP
Other:	De-blocking filter	MPEG-2 transport output:	MPEG-2 Transport Stream over UDP / IP SCTE35 ad insertion splice points from SCTE104 tcp or VANC inputs Digital turnaround for compressed inputs
Video Processing		Control and Status	
Formats:	1080P59.94/50 (option) 1080i/29.97; 720p/59.94 1080i/25; 720p/50 (HD) 625i/50; 525i/29.97 (SD)	Type:	Browser interface for single unit control SNMPv2 with published MIB Linux operating system
Video Pre-Processing:	Motion Compensated Temporal Filter PVP/ADP Adaptive Detail Preservation PVP/3DNR Advanced Spatio/temporal filtering	Physical	
Receiver Inputs		Width:	18.9" (48cm)
ASI and UDP / IP MPEG-2 inputs up to MP@HL MPEG-4 inputs up to HP@L4 ATSC digital terrestrial (SE-6601R)		Depth:	15.5" (39.4cm)
Audio Processing		Height:	1RU, 1.75" (5cm)
Mode:	MPEG-1 Layer 2 HE-AAC (v2) audio encoding LC-AAC audio encoding Transcoding from AC3 to DD Plus and HE-AAC Dolby® Digital pass-through Audio options (see ordering options)	Weight:	20 lb (9.1Kg)
Ancillary Signal Support		Packaged Weight:	33 lb (15Kg)
L21 EIA 608, EIA 708 closed captioning, Teletext, WSS, AFD		Power:	100-240V (continuous), 47-63Hz
Digital Video Input		Power Consumption:	Less than 100W
Signal:	Serial digital per SMPTE-292M (HD) Serial digital per SMPTE-259M (SD) Serial digital per SMPTE-424M/425M Dual link serial digital per SMPTE-327M Embedded audio per SMPTE-272M/299M	Cooling Air:	Front to rear
Connector:	BNC, female	Temperature:	0 to 40C
Number:	2	Other	
		Limited Warranty:	One year
		Compliance:	FCC, CE, UL, RoHS and TUV
		Ordering	
		SE-6601	
		SE-6601R	for ATSC RF input applications
		Ordering Options - Software Licensed	
		DD2	Dolby Digital stereo encoding 2 stereo pairs
		DD-PLUS	Dolby Digital Plus Pro stereo encoding 2 stereo pairs
		AC3xAAC	Dolby Digital to AAC transcoding
		AC3xDD-PLUS	Dolby Digital to Dolby Digital Plus Pro transcoding
		1080P	1080P59.94 encoding
		STATMUX	Statmux support
		AVCDEC	Transcode from HP@4.0 AVC inputs
		Ordering Options - Hardware	
		AC PSU	Spare AC power supply module
		Audio cable	Audio cable for discrete AES inputs

**MOTOROLA**

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