CherryPicker® Application Platform

CAP-1000

MPEG-4 AVC Preprocessing
Performs grooming, splicing, and processing-intensive statistical remultiplexing.

Exceptional Bandwidth
Up to 2 Gbps aggregate video stream throughput in a small 1RU chassis.

Carrier-Class Reliability
Redundant and hot swappable power supplies, hot swappable fan trays and field-replaceable input/output and processing modules.

Future-Proof
Programmable DSP architecture and 8 times the processing power of the DM6400 combine to meet evolving technical standards and emerging application needs over time through simple software upgrades.

10 Years of Innovation and Performance
Inherits over 80% of the software from the Emmy®-award winning CherryPicker product line, which translates into interoperability and operational ease of use.

Powerful. Reliable. Scalable.

The Motorola CherryPicker Application Platform (CAP) is an advanced, IP-centric architecture designed to provide the power, scalability, and reliability required to build high-density digital video solutions for service providers.

The CAP-1000, a new member of the product line, gives video service providers unparalleled efficiency and flexibility in managing and localizing video streams.

The CAP-1000 provides a software application for rate shaping of real-time, broadcast–quality MPEG-4/AVC and MPEG-2 SD and HD streams. It enables additional applications, such as grooming, dejittering, and seamless localized ad insertion, and has the performance needed to support mission-critical initiatives like Switched Digital Video, VOD Playlist Advertising, IPTV, and Bulk Encryption.

The CAP-1000 provides a highly-programmable device that can support evolving technical standards and emerging application needs through simple software upgrades, allowing customers to realize continuous returns on their initial capital investment.

The CAP-1000's operations-friendly design ensures the high availability needed for high stream counts with redundant and hot-swappable power supplies, hot-swappable fan trays, with 1:1 and N:1 redundancy, and field-replaceable input/output cards and processing modules, all in a space- and power-saving 1RU (rack unit) enclosure.

The CAP-1000 operates in converging IP networks with carrier-class reliability, and features massive processing power to handle up to 2Gbps of aggregate video stream throughput.

To maximize flexibility, Motorola has abstracted the hardware elements of the CAP-1000 from the software layer, enabling delivery of features such as session-based encryption, digital watermarking, Forward Error Correction (FEC), motion graphics overlay, and video scaling via future software releases.

SPECIFICATION SHEET
CherryPicker® Application Platform

EXTENSIVE INTEROPERABILITY

MPEG-4/AVC and MPEG-2
SPTS and MPTS
ASI and Ethernet I/O
Unicast and Multicast ARP, ICMP, IGMPv3 over UDP / IP / RTP
QoS and VLAN tagging IEEE 802.1p, 802.1q

SEAMLESS PROGRAM SPLICING AND SWITCHING

High reliability HD and SD Digital ad insertion
SCTE 35 and 30 standards

COMPREHENSIVE RE-MULTIPLEXING

PID filtering and remapping
PCR de-jittering and restamping
PAT and PMT computation band insertion
Data insertion
Advanced dynamic SI and PSI processing
Synchronization of data and video

ADVANCED PROCESSING

CBR to VBR conversion
VBR to CBR conversion (Rate clamped VBR)
Bit rate conversion CBR to CBR, VBR to VBR
SD/HD rate shaping
Grooming and Re-Grooming

FLEXIBLE MANAGEMENT AND MONITORING

Advanced Program analysis and bit rate measurements
Access through all GbE ports
XML configuration
SNMP Traps and status
HTTP web browser configuring
Local and remote logs
Full Java-based GUI

VIDEO

MPEG-4/AVC Main and High Profile, up to Level 4 MPEG-2, MP@ML, MP@HL

HD	720p up to 1920 pixels at 60fps and 50 fps
HD	1080i up to 1920 pixels at 30fps and 25fps
NTSC	480i x 704/544/528/480/352, 29.97 fps
PAL	576i x 704/720/544/480/352, 25 fps

AUDIO

Dolby AC-3
MPEG-2 Layer I and II
AAC

INPUT/OUTPUT PORTS

Ethernet	(4) copper RJ-45 1000Base-T
	(4) optical LC SFP connectors 1000Base-SX/LX
	Supports single-mode and multi-mode optical transceivers
DVB-ASI	(4) or (8) BNC connectors Each port is programmable as input, primary output, or mirroring output

CONTROL/CONSOLE

Web-based GUI
SNMP support
GPIO with Micro-D 15-pin male connector, 2 inputs, 2 outputs
56 kbps V.92 modem with RJ-11 port
4PAC serial console maintenance port
RJ-45 GbE debug port for initial IP configuration

ELECTRICAL/MECHANICAL

Form Factor	1RU (1.75in); 19 in rack mountable 23.5" L x 17.5"W x 1.75" H (excluding rack ears and connectors)
Weight	31 lb
Input Voltage	100 to 240 VAC
Power Consumption	3.5 VAC, 120 V, 60 Hz; 350 W max.
Frequency	50 to 60 Hz
Operating Temperature	0 °C to +50 °C
Cooling	Side-to-side
Humidity	5% to 95%, non-condensing
Certification	UL, CB, CE, VCCI, TUV, FCC, CISPR 22 Class A, ROHS
NEBS	Level 1-ready

All features, functionality, and other product specifications are subject to change without notice or obligation.

MOTOROLA

www.motorola.com
101 Tournament Drive,
Horsham, Pennsylvania 19044 U.S.A.

554186-001-a 0408 5887 - 0K