The DM 6400, part of Motorola’s CherryPicker line of digital video Application Platforms, delivers unparalleled quality and reliability for networking, distributing, and processing both standard-definition (SD) and high-definition (HD) services. It offers a wide array of digital video applications, including grooming of custom channel lineups, rate shaping and statistical remultiplexing, localized digital ad insertion, and Graphic overlay and SqueezeBack.

**Technology Foundation**
The DM 6400 is a compact (1 RU) chassis with five slots for custom input/output options. This flexible hardware architecture allows operators to add application-specific modules as their business requirements grow.

At the heart of the DM 6400 are custom-designed ASICs, powering the most efficient and highest quality SD and HD rate shaping available. Designed from the ground up to address the unique computational requirements of MPEG-2 digital video, this powerful ASIC solution enables the DM 6400 to handle an unsurpassed number of simultaneous digital video stream processes.

**Digital Ad Insertion over IP Networks**
Moving from ASI to IP-based distribution networks is an integral step in the transition to all-digital networks. To maintain ad revenues during this transition, operators also need to shift DPI to an IP-distribution network. The DM 6400 allows operators to insert local and national digital ads over IP networks, facilitating a more efficient process for digital insertion.

**Graphic overlay and SqueezeBack**
A powerful new DSP card (optional) now supports Motion and Static Graphic Overlays and SqueezeBack using internal and external sources via SDI (Serial Digital Interface) Key and Fill Video.

**Across ASI and GigE Networks**
With the DM 6400, operators can continue to use today’s DVB-ASI networks while providing a scalable platform that supports a phased transition to a GigE video network. As operators move from ASI to GigE, the ability to mirror outputs allows them to process each transport only once and output it twice, removing the cost of duplicate processing of the same input.
**Distributed Chassis**
The innovative Distributed Chassis™ architecture enables operators to remotely operate and monitor DM 6400s distributed throughout their network. Using an IP network switching fabric, Distributed Chassis allows operators to process and distribute digital video services from any input to any output across all of the DM 6400s in a GigE network.

The DM 6400 is easy to configure and control using a simple Web-based point-and-click graphical user interface. The entire distributed network of DM 6400s can be remotely configured and controlled from the same Master Control Management Console.

**Interoperability**
The DM 6400 is fully interoperable with all MPEG-2– and MPEG-4 AVC-compliant equipment from leading cable industry manufacturers. Third-party SNMP and XML applications can be used to seamlessly configure, manage, and monitor a DM 6400 network.

**Management Message Insertion**
The SCTE 30 to 35 conversion feature available on every DM 6400 gives operators more flexibility in managing cues and digital messages used to insert digital content. Operators can create splice-ready streams at the master headend by combining pre-existing digital content with SCTE 35 management messages sent to the DM. The streams can then be distributed through network divisional rings in a more efficient way, and operators can seamlessly insert localized digital content at regional hubs.

**Keeping Services On-Air**
The DM 6400 offers program and input redundancy within a single chassis for keeping services on-air. Additionally, removable data flash cards store identity and configuration information for each individual chassis, and can be transferred directly to a backup chassis as part of a fail-safe environment.
**INPUT/OUTPUT**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inputs per Chassis</td>
<td>Up to 19 DVB-ASI</td>
</tr>
<tr>
<td>Video Streams Rate-Shaped</td>
<td>64 max. (SD), 16 max. (HD)</td>
</tr>
<tr>
<td>Interface Formats</td>
<td>GigE, DVB-ASI, DHEI</td>
</tr>
<tr>
<td>Data Coding</td>
<td>MPEG-2, MPEG-4 ACV (DVB, DCII, ATSC), SPTS, MPTS</td>
</tr>
<tr>
<td>Video Formats</td>
<td>MPEG-2 MP@ML, MP@HL (HD)</td>
</tr>
<tr>
<td></td>
<td>MPEG-4 AVC up to level 4 (ad insertion only)</td>
</tr>
<tr>
<td>Frame Rates</td>
<td>25, 29.97, 30, 59.94, 60 Hz</td>
</tr>
<tr>
<td></td>
<td>3:2 pulldown (film)</td>
</tr>
<tr>
<td>Aspect Ratios</td>
<td>4:3 and 16:9</td>
</tr>
<tr>
<td>Audio Formats</td>
<td>Dolby® AC-3 and Musicam</td>
</tr>
<tr>
<td>Input Data Rate</td>
<td>200 Mbps per ASI port</td>
</tr>
<tr>
<td>Aggregate Output per Chassis</td>
<td>Rate-Shaped/Spliced Programs: Up to 160 Mbps</td>
</tr>
<tr>
<td></td>
<td>GigE Content Aggregation: 900 Mbps</td>
</tr>
<tr>
<td>Bit Rates of Individual Programs</td>
<td>0.2 to 20 Mbps (CBR or VBR)</td>
</tr>
</tbody>
</table>

**INPUT PREPROCESSING MODULE FOR RESOLUTION CHANGE**

- Input Ports: Four DVB-ASI
- Input Horizontal Resolutions: 528, 544, 704, 720 lines
- Output Horizontal Resolutions: 352, 480, 528, 544, 704 lines
- Eight independent DSPs each process a single SD stream
- Vertical resolution unchanged up to 576 lines

**GIGABIT ETHERNET INPUT/OUTPUT MODULE**

- input/output Ports: Two
- Data Rate per Port: 1 Gbps input/output
- SPTS or MPTS per Port: Up to 128 UDP streams
- Physical Interface: 1 Gbps, 1000Base-CX/SX/LX
- Connectors: Two electrical/copper RJ-45, two optical LC-SFP (optional)
- Quality of Service (QoS): 802.1p, 802.1q
- Unicast, multicast, ARP, ICMP, and IGMP support over UDP/IP
- Multimode (short haul), Singlemode (long haul)
- Optical transceivers (optional)
- GigE port mirroring

**CONTROL**

- Ethernet (10/100Base-T): Web access for integrated controller and GUI, XML and SNMP for external service managers, SCTE 35 cue processing and forwarding, API SCTE 30 for ad servers, remote system monitoring
- RS232: Remote system monitoring, dial-in system monitoring through included modem
- Contact Closures: Two GPI monitoring controls, two alarm outputs
- Front-panel keypad and LCD: Configuration and monitoring, system and program status

**ELECTRICAL/MECHANICAL**

- Form Factor: 1 RU, 19 in-rack-mountable 20” L x 17.25” W x 1.75” H (excluding rack ears and connectors)
- Input Voltage: 100 to 240 VAC, –48 VDC (optional)
- Frequency: 50 to 60 Hz
- Power Consumption: 2.9 A VAC, 2.7 A VDC (optional)
- Operating Temperature: 0 °C to 50 °C
- Side Cooling: Right to left
- Humidity: 5 to 95%, non-condensing
- Safety Certification: UL, CUL, TUV
- Emissions Certification: FCC Class A, CE

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