



# MOTOROLA DCH3416

ALL DIGITAL, HDTV, DUAL-TUNER DVR  
M-CARD™ HOST SET-TOP

## FEATURES

- M-Card (Multi-stream CableCARD) Host support for conditional access
- Digital Video Recording (DVR) with support for dual recording and watch-and-record functionality
- 160 GB hard drive with shock mounting and fan
- Compatible with Motorola DCT legacy APIs
- Standard-definition (SD), enhanced-definition (ED), and high-definition (HD) MPEG-2 video support with output scaled to 480i, 480p, 720p, or 1080i
- Dual 54 to 864 MHz video tuners
- Digital video (64 QAM/256 QAM)
- Video scaling (Picture-in-Graphics)
- Accelerated graphics
- Motion-adaptive de-interlacing
- Dolby™ Digital 5.1 and PCM audio
- 16 MB Flash (standard)
- 128 MB DRAM total (standard)
- DOCSIS® 2.0 cable modem with support for DSG
- RF out-of-band (OOB) data transmitter/receiver
- On-screen diagnostics
- Macrovision™, HDCP, 5C DTCP, and CGMS-A content protection schemes on the respective interfaces
- Full-featured front panel display and controls



## PRODUCT SPECIFICATIONS

### STANDARD INTERFACES

#### Front Panel

On/Standby and Message indicators, output video format indicator, 4-character 7-segment display, 2 recording indicators, IR remote control sensor, USB 2.0 Host Type A port



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## TECHNICAL SPECIFICATIONS

### STANDARD INTERFACES CONT.

#### Rear Panel

F-connector for cable input, M-Card slot, RF remodulated output (Ch 3/4), HDMI output, YPbPr component output, baseband composite video output, S-video output, L/R audio output, coaxial and optical S/PDIF digital audio outputs, USB 2.0 Host Type A port, 1394a interfaces (2), 10/100 Mbps Ethernet interface, eSATA interface, mini-phone serial port

### MANUFACTURING OPTIONAL FEATURES

M-Card pre-installed, 256 MB DRAM (upgrade from 128 MB); 32 MB Flash (upgrade from 16 MB)

### GENERAL

**RF Input Frequency**

54 to 864 MHz

**Memory**

16MB Flash; 128MB DRAM standard unified

**Legacy Platform**

Supported

**Video**

MIPS, RISC-based

**Processor**

Up to 32-bit color, accelerated 2D support, and scalable video-in-graphics

**Graphics Resolution**

**SD Outputs**

4:3 up to 720x480

**HD Outputs**

16:9 up to 1920x1080

**Video Resolution**

480i, 480p, 720p, 1080i and 1080p 24/30 (HDMI only)

**Operating Temperature**

50 °F to 108 °F (15 °C to 42 °C)

**Operating Humidity**

5 to 90% (non-condensing)

**AC Voltage**

105 to 125 VAC, 60 Hz

**Power Dissipation**

35 W (depending on features)



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## TECHNICAL SPECIFICATIONS

### GENERAL CONT.

**OOB Modulation**

QPSK

Frequency Agile receiver 70 to 130 MHz

Bandwidth 2.0 MHz maximum

Level -15 to 15 dBmV

**Digital Input Level**

**64 QAM**

-15 to 15 dBmV

**256 QAM**

256 QAM -12 to 15 dBmV

**Dimensions**

2.76 x 17.2 x 12.7 in. (H x W x D)

**Weight**

12.0 lbs.