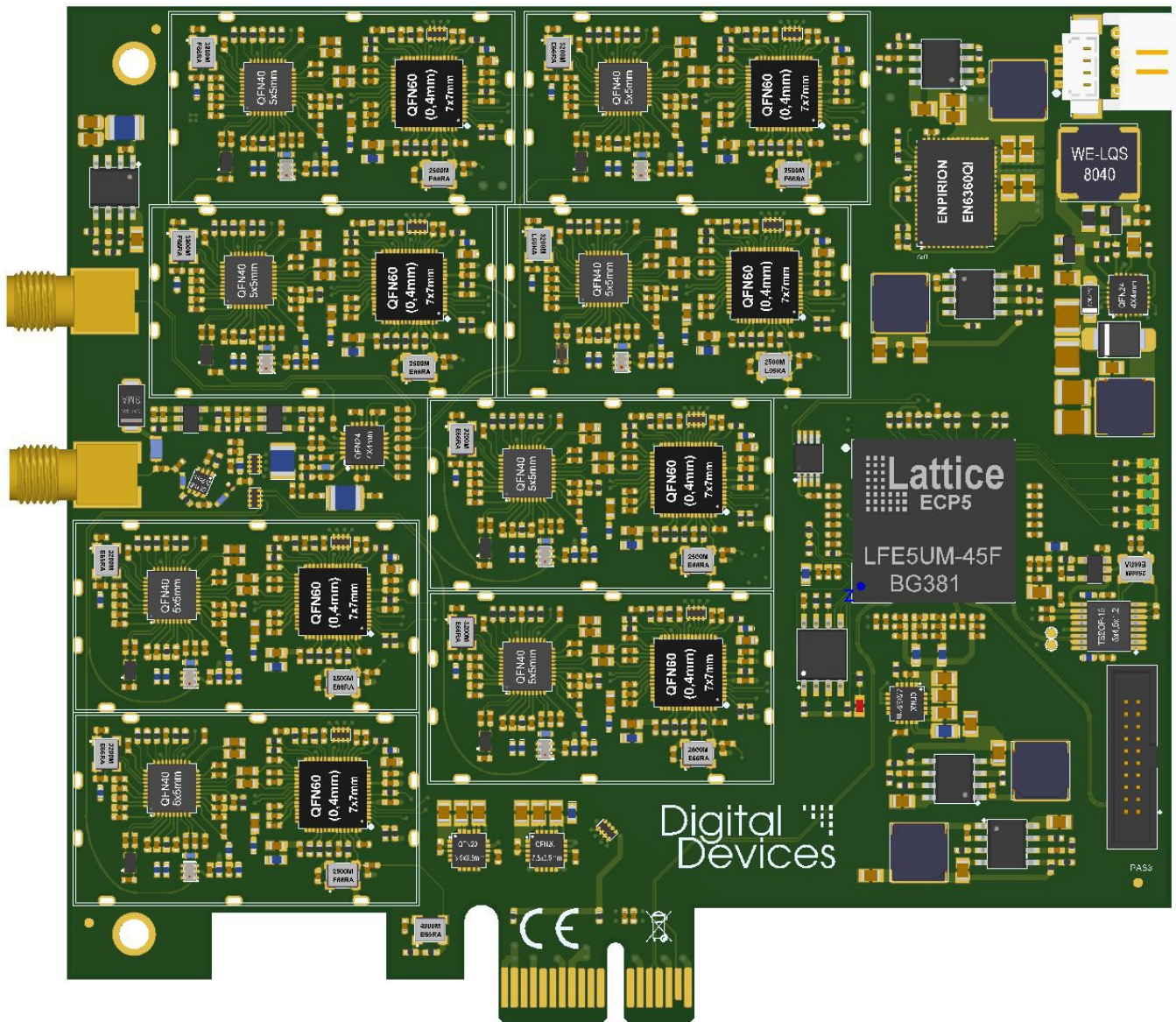


Product Information: MAX M8



The Digital Devices MAX M8 V2 is a tuner card with **eight** tuners on a single card with PCIe connector.

The **card** supports **eight independent** DVB-S/S2/S2X ISDB-S tuners via **one** single connector (Unicable / Jezz).

In addition the card supports eight DVB-C/T/T2 ISDB-C/T tuners via one connector. High class splitter and amplifier are integrated on the board to enable best-in-class sensitivity.

**Supported modulations:**

**ISDB-T**

Mode Mode1(2K), Mode2(4K), Mode3(8K)  
Guard interval length 1/32, 1/16, 1/8, 1/4  
Carrier modulation scheme QPSK, 16QAM, 64QAM, DQPSK  
Convolutional-coding rate 1/2, 2/3, 3/4, 5/6, 7/8  
Synchronization range  
AFC range +700 kHz (typ)

**ISDB-S**

Symbol rate 28.86 Mbaud  
Modulation method 8PSK, QPSK, BPSK  
Convolutional-coding rate 8PSK 2/3  
QPSK 1/2, 2/3, 3/4, 5/6, 7/8  
BPSK 1/2  
Synchronization range  
AFC range +7 MHz (typ) (when operating with AFC automatic control)

**ISDB-C**

Symbol rate 5.274 Mbaud  
Roll-off rate 0.13  
Carrier modulation scheme 64QAM, 256QAM  
Synchronization range  
AFC range +250 kHz (typ) (when operating with AFC automatic control)

**DVB-T**

Bandwidth 6MHZ, 7MHZ, 8MHZ  
FFT size 2K, 8K  
Guard interval length 1/32, 1/16, 1/8, 1/4  
Carrier modulation scheme QPSK, 16QAM, 64QAM  
Convolutional-coding rate 1/2, 2/3, 3/4, 5/6, 7/8  
Synchronization range  
AFC range ±900 kHz (typ)

**DVB-T2**

Transmission method  
Bandwidth 5MHZ, 6MHZ, 7MHZ, 8MHZ, 1/7MHZ  
FFT size 1K, 2K, 4K, 8K, 16K, 32K (included extended mode)  
Guard interval length 1/32, 1/16, 1/8, 1/4, 1/128, 19/128, 19/256  
Carrier modulation scheme QPSK, 16QAM, 64QAM, 256QAM  
Convolutional-coding rate 1/2, 3/5, 2/3, 3/4, 4/5, 5/6(T2-Base),  
1/2, 3/5, 2/3, 4/3, 1/3, 2/5(T2-Lite)  
Synchronization range  
AFC range +900 kHz (typ)

**DVB-C**

Symbol rate 0.7 to 7 Mbaud  
Roll-off rate 0.15  
Carrier modulation scheme 16QAM, 32QAM, 64QAM, 128QAM, 256QAM  
Synchronization range  
AFC range ±500 kHz (typ) (when operating with AFC automatic control)

**DVB-S**

Modulation method QPSK  
Symbol rate 1 to 45 Mbaud  
Coding rate 1/2, 2/3, 3/4, 5/6, 7/8  
Synchronization range  
AFC range +5 MHz (typ)

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## Product Information: MAX M8

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### DVB-S2

Modulation method	32APSK, 16APSK, 8PSK, QPSK
Symbol rate	32APSK 1 to 40 Mbaud 16APSK 8PSK, QPSK 1 to 45 Mbaud
Coding rate	32APSK 3/4, 4/5, 5/6, 8/9, 9/10 16APSK 2/3, 3/4, 4/5, 5/6, 8/9, 9/10 8PSK 3/5, 2/3, 3/4, 5/6, 8/9, 9/10 QPSK 1/4, 1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 4/5, 5/6, 8/9, 9/10
Synchronization range	
AFC range	+5 MHz (typ)

### DVB-S2X

Modulation method	32APSK-L, 32APSK, 16APSK-L, 16APSK, 8APSK-L, 8PSK, QPSK
Symbol rate	32APSK-L, 32APSK 1 to 40 Mbaud 16APSK-L, 16APSK, 8APSK-L, 8PSK, QPSK 1 to 45 Mbaud
Coding rate	32APSK-L 2/3 32APSK 32/45, 11/15, 7/9 16APSK-L 1/2, 8/15, 5/9, 3/5, 2/3 16APSK 26/45, 3/5, 28/45, 23/36, 25/36, 13/18, 7/9, 77/90 8APSK-L 5/9, 26/45 8PSK 23/36, 25/36, 13/18 QPSK 13/45, 9/20, 11/20
Synchronization range	
AFC range	+5 MHz (typ)

### ISDB-S3

Symbol rate	33.7561 [Mbaud]
Roll-off rate	0.03
Modulation method	32APSK, 16APSK, 8PSK, QPSK, n/2 shift BPSK
Convolutional-coding rate	1/3, 2/5, 1/2, 3/5, 2/3, 3/4, 7/9, 4/5, 5/6, 7/8, 9/10
Synchronization range	
AFC range	+5 MHz (typ)

### J.83 Annex-B

Symbol rate	5.361 Mbaud(256QAM) / 5.067 Mbaud(64QAM)
Roll-off rate	0.12(256QAM) / 0.18(64QAM)
Carrier modulation scheme	256QAM, 64QAM
Synchronization range	
AFC range	+270 kHz to -300 kHz (typ)
Multiple Carriers Transmission	
Inter-carrier delay absorption	< SF/4