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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight M9703B

Keysight M9703B AXIe High Speed Digitizer Wideband Digital Receiver The Keysight M9703B is an 8-channel 12-bit AXIe wideband digitizer/receiver capturing DC to 2 GHz at up to 3.2 GS/s with optional interleaving. OEM data sheet 5992-1140 lists phase-coherent multi-channel acquisition, up to 16 GB DDR3 memory, and real-time DDC. Advanced physics, radar and SATCOM multi-channel acquisition, 5G MIMO R&D, multichannel baseband IQ. Eight phase-coherent 12-bit channels in one AXIe slot The Keysight M9703B is an 8-channel 12-bit AXIe wideband digitizer/receiver capturing DC to 2 GHz at up to 3.2 GS/s with optional interleaving. OEM data sheet 5992-1140 lists phase-coherent multi-channel acquisition, up to 16 GB DDR3 memory, and real-time DDC. Advanced physics, radar and SATCOM multi-channel acquisition, 5G MIMO R&D, multichannel baseband IQ. Eight phase-coherent 12-bit channels in one AXIe slot Real-time digital down-conversion on all channels



MODEL

**Agilent / Keysight
M9703B**

CALIBRATION

**Available on
request**

CONDITION

Used

STATUS

In stock

RFQ / SKU

M9703B

LISTING

<https://aumictechlabs.com/products/m9703b-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Keysight M9703B is an AXIe high-speed digitizer and wideband digital receiver delivering phase-coherent multi-channel signal acquisition for demanding RF, radar, and defense applications. This single-slot card combines 12-bit ADC resolution with eight DC-coupled channels, sampling to 1.6 GS/s standard or 3.2 GS/s in interleaved mode, and supports input

frequencies from DC to 650 MHz (or up to 2 GHz with the -F10 option). With 16 GB of DDR3 acquisition memory, four Xilinx Virtex-6 FPGAs for real-time processing, and channel-to-channel skew stability of ± 200 fs, the M9703B excels in phased-array antenna development, radar signal analysis, and multi-channel coherent measurements.

Technical Specifications

ADC Resolution: 12-bit
Channel Count: 8 channels standard; 4 channels with interleaving option (-INT)
Sampling Rate: Up to 1.6 GS/s (8 channels); up to 3.2 GS/s (4-channel interleaved mode with -SR2 and -INT)
Input Frequency Range: DC to 650 MHz (-3 dB); DC to 2 GHz with -F10 option (non-interleaved); DC to 1.4 GHz interleaved with -F10
Acquisition Memory: 16 GB DDR3 total (1 GSample/channel)
Input Impedance: 50 Ω
Coupling: DC coupled
Full Scale Range: 1 V or 2 V selectable
Input Voltage Offset Range: $\pm 2 \times$ FSR
Channel-to-Channel Skew Stability: ± 200 fs
Trigger Time Interpolator Precision: Up to 15 ps RMS with -SR2 option

Key Features

Four Xilinx Virtex-6 FPGAs for real-time signal processing
Optional digital down-converter (-DDC) for signal tuning, dynamic range enhancement, and noise floor reduction
Customizable I/O interfaces
Multi-module synchronization supporting up to 64 phase-coherent channels in suitable AXIe chassis
Multichannel phase-coherent DDC streaming and recording (-CB1/-CB2 options)

Typical Applications

AESA phased-array antenna characterization
Radar signal acquisition and analysis
5G and satellite communications
Aerospace and defense RF measurements
Advanced physics research

Compatibility & Integration

AXIe and AdvancedTCA (ATCA) compliant
Compatible with M9506A AXIe chassis
IVI-C and IVI-COM drivers (IviDigitizer class)
Support for Visual C/C++, C#, VB.NET, MATLAB, LabVIEW, and Linux

M9703B Characteristics / Specifications

PARAMETER	VALUE
Model	M9703B
Instrument Type	AXIe high-speed digitizer wideband digital receiver
Analog Channels	8 (4 when interleaving with INT)
Adc Resolution	12 bits
Max Sample Rate	3.2 GS/s with SR2 and INT
Sample Rate Sr	1.6 GS/s (3.2 GS/s interleaved with INT)
Input Frequency Range F	DC to 650 MHz
Input Frequency Range F10 Non Interleaved	DC to 2 GHz
Input Frequency Range F10 Interleaved	DC to 1.4 GHz
Acquisition Memory M	4 GB (256 MSample/ch)
Input Impedance	50 ohm DC coupled
Full Scale Ranges	1 V or 2 V selectable
Input Voltage Offset Range	plus or minus 2 times FSR
Channel To Channel Skew Stability	plus or minus 200 fs
Trigger Time Interpolator Precision	up to 15 ps rms with SR2
Backplane Data Throughput	up to 1.4 GB/s sustained PCIe x4
Onboard Fpgas	four Xilinx Virtex-6
Digital Down Conversion Instantaneous Bandwidth	200 MHz with SR1 or 320 MHz with SR2
Form Factor	1 slot AXIe
Streaming Bundles Instantaneous Bandwidth	up to 320 MHz alias protected IBW
Compatible Chassis Examples	M9502A M9505A M9506A M9514A
Compatible Controller Example	M9537A AXIe embedded controller
Os Support	Windows and Linux

PARAMETER	VALUE
Bandwidth	200 MHz with SR1 or 320 MHz with SR2

M9703B Specifications

PARAMETER	VALUE
Applications	Advanced physics, radar and SATCOM multi-channel acquisition, 5G MIMO R&D, multichannel baseband IQ.
Key Features	Eight phase-coherent 12-bit channels in one AXIe slot
Technical Specifications	Model: M9703B

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
Specifications	
PARAMETER	VALUE
Model	M9703B
Instrument Type	AXIe high-speed digitizer wideband digital receiver
Analog Channels	8 (4 when interleaving with INT)
Adc Resolution	12 bits
Max Sample Rate	3.2 GS/s with SR2 and INT
Sample Rate Sr1	1 GS/s (2 GS/s interleaved with INT)
Sample Rate Sr2	1.6 GS/s (3.2 GS/s interleaved with INT)
Input Frequency Range F05	DC to 650 MHz
Input Frequency Range F10 Non Interleaved	DC to 2 GHz
Input Frequency Range F10 Interleaved	DC to 1.4 GHz
Acquisition Memory M10	1 GB (64 MSample/ch)
Acquisition Memory M40	4 GB (256 MSample/ch)
Acquisition Memory M16	16 GB (1 GSample/ch)
Input Impedance	50 ohm DC coupled
Full Scale Ranges	1 V or 2 V selectable
Input Voltage Offset Range	plus or minus 2 times FSR
Channel To Channel Skew Stability	plus or minus 200 fs
Trigger Time Interpolator Precision	up to 15 ps rms with SR2
Backplane Data Throughput	up to 1.4 GB/s sustained PCIe x4
Onboard Fpgas	four Xilinx Virtex-6
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PARAMETER	VALUE
Compatible Controller Example	M9537A AXIe embedded controller
Os Support	Windows and Linux

Notes

Channel count, resolution, sample rates, bandwidth options, memory, impedance, FSR, skew, TTI, throughput, and FPGA count from Keysight M9703B data sheet 5992-1140.

Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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NIST-traceable calibration · SAM registered ·
30-day returns
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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.