

Product Details and Certifications

Cross Reference RA Part Number: PN-16577



Product: 1783-MX08F

Description: Stratix 8000 Fiber Expansion Module, 8-port



Representative Photo Only (actual product may vary based on configuration sections)

STRATIX DATA

Bulletin Number	1783 Stratix Device
Stratix Ethernet Family	Stratix 8000
Ethernet Switch	Stratix 8000 Switch, Fiber Expansion Module, 8-port
Switch Type	Managed Switch
No. of Copper Ports	8
No. of Fiber SFP Slots	N/A
Power Requirements	3.3V DC, 3.6 A max
Power Consumption	10.7 W @ 24V DC @ 40°C (104°F), 10.9 W max

ADDITIONAL DETAILS

Operating Temperature	(-40..60 °C) (-40...140 °F)
Ports per Module	8

CERTIFICATIONS AND APPROVALS

UL
CE
IEC

For UL Certifications Directory:

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm>

Table 17 - Certifications - Stratix 8000 and Stratix 8300 Switches

Certifications (when product is marked) ⁽¹⁾	1783-MS06T, 1783-MS10T, 1783-RMS06T, 1783-RMS10T
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810.
CE	European Union 2004/108/EC EMC Directive, compliant with: <ul style="list-style-type: none"> EN 61326-1; Meas./Control/Lab., Industrial Requirements EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2011/65/EU RoHS, compliant with: <ul style="list-style-type: none"> EN 50581; Technical Documentation
C-Tick	Australian Radiocommunications Act, compliant with: <ul style="list-style-type: none"> AS/NZS CISPR 11; Industrial Emissions
Ex	European Union 94/9/EC ATEX Directive, compliant with: <ul style="list-style-type: none"> EN 60079-15; Potentially Explosive Atmospheres, Protection "n" EN 60079-0; General Requirements II 3 G Ex nA nC IIC T4 Gc
KC	Korean Certification of Broadcasting and Communications Equipment, compliant with: <ul style="list-style-type: none"> Framework Act on Telecommunications and Radio Waves Act
EtherNet/IP	ODVA conformance tested to EtherNet/IP specifications

(1) See the Product Certification link at <http://www.ab.com> for declarations of conformity, certificates, and other certification details.

Optional Expansion Modules—Stratix 8000 and Stratix 8300 Switches


Cat. No.	Description
1783-MX08T	Expansion module with 8 10/100 Base-T copper Ethernet ports
 1783-MX08F	Expansion module with 8 100 Base-F fiber-optic Ethernet ports
1783-MX04S	Expansion module with 4 100 FX fiber-optic SFP slots
1783-MX08S	Expansion module with 8 100 FX fiber-optic SFP slots
1783-MX04E	Expansion module with 4 Power over Ethernet ports
1783-MX04T04E	Ethernet expansion module with 4 10/100 Base-T copper Ethernet ports and 4 Power over Ethernet ports

Table 18 - Technical Specifications - Stratix 8000 and Stratix 8300 Expansion Modules

Attribute	1783-MX08T	1783-MX08F	1783-MX04S	1783-MX08S
Description	Expansion module • 8 ports, copper	Expansion module • 8 ports, fiber	Expansion module • 4 SFP ports, fiber	Expansion module • 8 SFP ports, fiber
Backplane power	3.3V DC, 1.7 A max	3.3V DC, 3.6 A max	3.3V DC, 2.5 A max	3.3V DC, 4.0 A max
Power consumption	2.9 W @ 24V DC @ 40°C (104°F), 4.7 W max	10.7 W @ 24V DC @ 40°C (104°F), 10.9 W max	5.3 W @ 24V DC @ 40°C (104°F), 7.6 W max	9.4 W @ 24V DC @ 40°C (104°F), 12.2 W max
Isolation voltage	75V (continuous), basic insulation type, expansion backplane to network channels No isolation between individual Ethernet ports Type tested at 1000V AC for 60 s	—		
Ethernet connections ⁽¹⁾	RJ45 connector according to IEC 60603-7, 2- or 4-pair Category 5e minimum cable according to TIA 568-B.1 or Category 5 cable according to ISO/IEC 24702	—		
Wiring category ⁽²⁾	2 - on Ethernet ports	—		
Enclosure type rating	None (open-style)			
North American temp code	T4			
IEC temp code	T4			
SFP modules ⁽³⁾	—		1783-SFP100FX 1783-SFP100LX 1783-SFP100EXC 1783-SFP100ZXC 1783-SFP100T ⁽⁴⁾ 1783-SFP1GSX 1783-SFP1GLX 1783-SFP1GEXE 1783-SFP1GZX 1783-SFP1GTE	

(1) See [page 57](#) for recommended products.
 (2) Use this conductor category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).
 (3) For SFP specifications, see [page 55](#).
 (4) The 1783-SFP100T module requires Stratix 8000 firmware revision 12.001 or later.

Table 19 - Technical Specifications - Stratix 8000 and Stratix 8300 Fiber Expansion Module

Attribute	1783-MX08F
Ethernet data rate	100 Mbps
Connecting mode	Full-duplex
Optical wavelength	1310 nm
Optical cable length, max	Graded index multimode fiber; 2000 m
Optical link budget	8 dB with 62.5/125 μm multimode cable 4 dB with 50/125 μm multimode cable
Connector type	IEC 61754-20 LC connector

Table 20 - Technical Specifications - Stratix 8000 and Stratix 8300 Power over Ethernet Expansion Modules

Attribute	1783-MX04E	1783-MX04T04E
Description	Expansion module <ul style="list-style-type: none"> 4 ports, Power over Ethernet 	Expansion module <ul style="list-style-type: none"> 4 ports, copper 4 ports, Power over Ethernet
Backplane power	3.3V DC, 0.94 A max	3.34V DC, 1.08 A max
Power over Ethernet input power	48V DC for PoE 54V DC for PoE+ or a combination of PoE and PoE+ 2.5 A max	48V DC for PoE 54V DC for PoE+ or a combination of PoE and PoE+ 2.4 A max
Power consumption	3 W @ 24V DC @ 40°C (104°F), 7.3 W max PoE power at 44V: 62 W max	3.5 W @ 24V DC @ 40°C (104°F), 7.9 W max PoE power at 44V: 62 W max
Power dissipation	3.0 W	3.6 W
Isolation voltage	60V (continuous), basic insulation type, expansion backplane to network ports, expansion backplane to power ports, and power ports to network ports No isolation between individual network ports Type tested at 1570V DC for 60 s	
Ethernet connections ⁽¹⁾	RJ45 connector according to IEC 60603-7, 2 or 4 pair Category 5e minimum cable according to TIA 568-B.1 or Category 5 cable according to ISO/IEC 24702	
Wiring category ⁽²⁾	2 - on Ethernet ports 2 - on power ports	
Enclosure type rating	None (open-style)	
North American temp code	T4	
IEC temp code	T4	
SFP modules	—	

(1) See [page 57](#) for recommended products.

(2) Use this conductor category information for planning conductor routing. Refer to Industrial Automation Wiring and Grounding Guidelines, publication [1770-4.1](#).

Table 21 - Environmental Specifications - Stratix 8000 and Stratix 8300 Expansion Modules


Attribute	1783-MX08T 	1783-MX08F	1783-MX04S, 1783-MX08S	1783-MX04E, 1783-MX04T04E
Temperature, operating IEC 60068-2-1 (Test Ad, Operating Cold), IEC 60068-2-2 (Test Bd, Operating Dry Heat), IEC 60068-2-14 (Test Nb, Operating Thermal Shock)	-40...+60 °C (-40...+140 °F)			
Temperature, surrounding air, max	60 °C (140 °F)			
Temperature, nonoperating IEC 60068-2-1 (Test Ab, Unpackaged Nonoperating Cold), IEC 60068-2-2 (Test Bb, Unpackaged Nonoperating Dry Heat), IEC 60068-2-14 (Test Na, Unpackaged Nonoperating Thermal Shock)	-40...+85 °C (-40...+185 °F)			
Relative humidity IEC 60068-2-30 (Test Db, Unpackaged Damp Heat)	5...95% noncondensing			
Vibration IEC 60068-2-6 (Test Fc, Operating)	2 g @ 10...500 Hz			
Shock, operating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	20 g		15 g	
Shock, nonoperating IEC 60068-2-27 (Test Ea, Unpackaged Shock)	30 g			
Emissions CISPR11 (IEC 61000-6-4)	Class A			

Table 21 - Environmental Specifications - Stratix 8000 and Stratix 8300 Expansion Modules (Continued)



Attribute	1783-MX08T 	1783-MX08F	1783-MX04S, 1783-MX08S	1783-MX04E, 1783-MX04T04E
ESD immunity IEC 61000-4-2	8 kV contact discharges 15 kV air discharges		6 kV contact discharges 8 kV air discharges	
Radiated RF immunity IEC 61000-4-3	20V/m with 1 kHz sine-wave 80% AM from 80...1000 MHz 10V/m with 200 Hz 50% Pulse 100% AM at 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM at 1890 MHz 10V/m with 1 kHz sine-wave 80% AM from 1000...2700 MHz		10V/m with 1 kHz sine-wave 80% AM from 80...2000 MHz 10V/m with 200 Hz 50% Pulse 100% AM at 900 MHz 10V/m with 200 Hz 50% Pulse 100% AM at 1890 MHz 3V/m with 1 kHz sine-wave 80% AM from 2000...2700 MHz	
EFT/B immunity IEC 61000-4-4	±4 kV at 2.5 kHz and ±2 kV at 5 kHz on Ethernet ports	—	±2 kV at 5 kHz on power ports and ±2 kV at 5 kHz on Ethernet ports	
Surge transient immunity IEC 61000-4-5	±2 kV line-earth (CM) on Ethernet ports	—	±1 kV line-line(DM) and ±2 kV line-earth(CM) on power ports ±2 kV line-earth(CM) on communication ports	
Conducted RF immunity IEC 61000-4-6	10V rms with 1 kHz sine- wave 80% AM from 150 kHz...80 MHz	—	10V rms with 1 kHz sine- wave 80% AM from 150 kHz...80 MHz	
Magnetic field immunity IEC 61000-4-8	30 A/m long duration and 300 A/m short duration at 50 Hz and 60 Hz		30 A/m long duration and 300 A/m short duration at 50 Hz	
Magnetic pulse immunity IEC 61000-4-9	—		300 A/m pulse	
Oscillatory surge withstand IEEE C37.90.1	2.5 kV	—		
Damped oscillatory wave immunity IEC 61000-4-18	—		±1 kV line-line(DM) and ±2.5 kV line-earth(CM) on power ports	

Table 22 - Certifications - Stratix 8000 and Stratix 8300 Expansion Modules

Certifications (when product is marked) ⁽¹⁾	1783-MX08T, 1783-MX08F 	1783-MX04S, 1783-MX08S	1783-MX04E, 1783-MX04T04E
c-UL-us	UL Listed Industrial Control Equipment, certified for US and Canada. See UL File E65584. UL Listed for Class I, Division 2 Group A,B,C,D Hazardous Locations, certified for U.S. and Canada. See UL File E194810. Ex nA IIC T4X Gc X / AEx nA IIC T4X Gc		
CE	European Union 2004/108/EC EMC Directive, compliant with: <ul style="list-style-type: none"> EN 61326-1; Meas./Control/Lab., Industrial Requirements EN 61000-6-2; Industrial Immunity EN 61000-6-4; Industrial Emissions EN 61131-2; Programmable Controllers (Clause 8, Zone A & B) European Union 2011/65/EU RoHS, compliant with: <ul style="list-style-type: none"> EN 50581; Technical Documentation 		
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