C150 · C300

FlexMedia Gigabit Ethernet and 10 Gigabit Ethernet Line Card with Pluggable Media Modules

The multi-port FlexMedia line card for the Force10 C-Series C150 and C300 features 36 10/100/1000Base-T ports, eight Gigabit Ethernet SFP ports, and two 10 Gigabit Ethernet SFP+ ports. This line card provides industry-leading flexibility for supporting applications that require a diverse set of Gigabit Ethernet and 10 Gigabit Ethernet interfaces in the same chassis.

Additionally, the C-Series ASICs and architecture enables linerate performance with QoS and Access Control Lists (ACLs) enabled, jumbo frame support, and simultaneous L2 switching and IPv4 routing. The intelligence embedded in the line cards allows localized switching, providing very low latency.

Key Features

- Consistent throughput for 64 to 9,252 byte frames on all ports regardless of features enabled
- 36 10/100/1000Base-T interfaces with auto-negotiation and auto-MDI/MDIX
- Intelligent power management with PoE (IEEE 802.3af) support, provides Class 3 inline power of 15.4 watts per port (LC-CB-10G-1G-36V)
- Eight Gigabit Ethernet interfaces with pluggable SFP modules providing support for 100Base-FX, 1000Base-SX, 1000Base-LX, 1000Base-ZX and 1000Base-T
- Two 10 Gigabit Ethernet interfaces with pluggable SFP+ modules providing support for 10GBase-SR and 10GBase-LR
- 5 microsecond switching latency under full load for 64 byte frames
- Per-port status and activity LEDs



Maxium flexibility with 10/100/1000Base-T, Gigabit Ethernet SFP, and 10 Gigabit Ethernet SFP+ interfaces on a single line card

Standard and PoE versions of the line card support wiring closet and data center applications



Ordering Information

Order Number	DESCRIPTION
LC-CB-10G-1G-36T	FlexMedia line card with 36 10/100/1000Base-T RJ45 interfaces, eight GbE interfaces – SFP modules required, and two 10 GbE interfaces – SFP+ modules required (series CB)
LC-CB-10G-1G-36V	FlexMedia line card with 36 10/100/1000Base-T RJ45 interfaces with PoE, eight GbE interfaces – SFP modules required, and two 10 GbE interfaces – SFP+ modules required (series CB)
GP-SFP2-1F	Qualified 100Base-FX Ethernet SFP optics module, LC connector
GP-SFP2-1S	Qualified SX GbE SFP optics module, LC connector
GP-SFP2-MTRJ-1S	Qualified SX GbE SFP optics module, MTRJ connector
GP-SFP2-1Y	Qualified LX GbE SFP optics module, LC connector
GP-SFP2-1Z	Qualified ZX GbE SFP optics module, LC connector
GP-SFP2-1T	Qualified 1000Base-T GbE SFP module, RJ45 connector
GP-10GSFP-1S	Qualified SR/SW 10 GbE SFP+ optics module, LC connector
GP-10GSFP-1L	Qualified LR/LW 10 GbE SFP+ optics module, LC connector

Physical

- 36 full-duplex 10/100/1000Base-T RJ45 ports (LC-CB-10G-1G-36V supports PoE), eight full-duplex Gigabit Ethernet ports with pluggable SFP modules, two full-duplex 10 Gigabit Ethernet ports with pluggable SFP+ modules
- Occupies a single slot in the Force10 C150/C300 chassis

Dimensions:	1.75 h x 15.25 w x 13.75" d
	(4.45 h x 38.74 w x 34.93 cm d)
Weight:	5.31 lbs (2.41 kg)
Maximum power	120 W (409 BTU/h)
consumption and	
thermal output:	

Maximum Operating Specifications

Temperature:	32° to 104°F
	(0° to 40°C)
Altitude:	No performance
	degradation to
	10,000 ft (3,048 m)
Relative humidity:	5 to 85 percent, non-condensing

Maximum Non-Operating

 Specifications

 Temperature:
 -40° to 158°F (-40° to 70°C)

 Maximum altitude:
 15,000 ft (4,572 m)

 Relative humidity:
 5 to 95 percent, non-condensing

Management

Link status and link activity LED per port Status LED per line card Onboard diagnostic capability

IEEE Compliance

802.1p	L2 Prioritization
802.1Q	VLAN Tagging, Double VLAN Tagging
802.3ab	Gigabit Ethernet (1000BASE-T)
802.3ac	Frame Extensions for VLAN Tagging
802.3ae	10 Gigabit Ethernet
802.3af	Power over Ethernet (LC-CB-10G-1G-36V)
802.3i	Ethernet (10BASE-T)
802.3u	Fast Ethernet (100BASE-TX, 100BASE-FX)
802.3z	Gigabit Ethernet (1000BASE-X)
MTU	9,252 bytes





Force10 Networks, Inc. 350 Holger Way San Jose, CA 95134 USA www.force10networks.com

408-571-3500 PHONE 408-571-3550 FACSIMILE

Regulatory Compliance

Safety

UL/CSA 60950-1, 1st Edition EN 60950-1, 1st Edition IEC 60950-1, 1st Edition Including all National Deviations and Group Differences EN 60825-1 Safety of Laser Products Part 1: **Equipment Classification Requirements** and User's Guide EN 60825-2 Safety of Laser Products Part 2: Safety of Optical Fibre Communication Systems FDA Regulation 21 CFR 1040.10 and 1040.11 **Emissions** Australia/New Zealand: AS/NZS CISPR 22: 2006, Class A Canada: ICES-003, Issue-4, Class A Europe: EN 55022: 2006 (CISPR 22: 2006), Class A Japan: VCCI V3/2007.04 Class A USA: FCC CFR 47 Part 15, Subpart B, Class A

Immunity

EN 300 386 V1.3.3: 2005 EMC for Network Equipment EN 55024: 1998 + A1: 2001 + A2: 2003 EN 61000-3-2: Harmonic Current Emissions EN 61000-3-3: Voltage Fluctuations and Flicker EN 61000-4-2: ESD EN 61000-4-3: Radiated Immunity EN 61000-4-4: EFT EN 61000-4-5: Surge EN 61000-4-6: Low Frequency Conducted Immunity

RoHS

All C-Series components are EU RoHS compliant.

SFP Support

Any combination of Force10 approved 100Base-FX, 1000Base-SX, 1000Base-LX, 1000Base-ZX or 1000Base-T SFPs may be populated. SFP modules are sold separately.

SFP+ Support

Any combination of Force10 approved 10GBase-SR or 10GBase-LR SFP+ modules may be populated. SFP+ modules are sold separately.

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