C Technical Specifications

The following tables list key features and specification data for the OmniCore 5052 and 5022 routing switches.

OmniCore 5052 Specifications

Item	Specification
Width	445 mm (17.5 in.)
Height	798 mm (31.4 in.)
Depth	615 mm (24.2 in)
Weight	102 kg (225 lbs), fully populated
Mounting	Free standing or standard 19-inch rack mount
Cooling Airflow (for two fans)	215 CFM (6.03 m^3/min)
Enclosure Construction	Painted, zinc plated, cold rolled steel
Controller/Processor	Motorola™ MC68603E 300 Power PC
Power Supply Input Voltage	AC: 100-240 Vac (rated input) or 90-264 Vac (design limits) and 8-5 Amps. DC: –48 - –60 Vdc (rated input) or –90 - –72 Vac (design limits) and 44-30 Amps.
Power Supply Input Frequency	50-60 Hz
Power Plug Type	North America: NEMA 515P (U.S.), C22.2, No. 42 (Canada) United Kingdom/Ireland: BS 1363 Europe: CEE 7/7 Japan: JIS 8303 (*Note:* OmniCore redundant power supply power-cords use only the IEC 320 connector end.)
Total Power Dissipation	2200 watts (max.)
Total Heat Dissipation	7500 BTUs (max.)
Operating Temperature Range	0° C to 50° C (32° F to 122° F)
Storage Temperature Range	–25° C to +70° C (–13° F to 158° F)
Humidity	0 to 85% R.H. (non-condensing, operating, and storage)
Operating Altitude	0 to 3000 m (0 to 10,000 ft)
Address Resolution	More than 1,500,000 addresses

OmniCore 5022 Specifications

Item	Specification
Width	445 mm (17.5 in.)
Height	577 mm (22.7 in.)
Depth	527 mm (20.75 in)
Weight	57 kg (125 lbs), fully populated
Mounting	Free standing or standard 19-inch rack mount
Cooling Airflow (for two fans)	140 CFM (3.96 m^3/min)
Enclosure Construction	Painted, zinc plated, cold rolled steel
Controller/Processor	Motorola™ MC68603E 300 Power PC
Power Supply Input Voltage	AC: 100-240 Vac (rated input) or 90-264 Vac (design limits) and 4-2.5 Amps. DC: –48 to –60 Vdc (rated input) or –40.5 to –72 Vac (design limits) and 17-13 Amps.
Power Supply Input Frequency	50-60 Hz
Power Plug Type	North America: NEMA 515P (U.S.), C22.2, No. 42 (Canada) United Kingdom/Ireland: BS 1363 Europe: CEE 7/7 Japan: JIS 8303 (*Note:* OmniCore redundant power supply power-cords use only the IEC 320 connector end.)
Total Power Dissipation	1000 watts (max.)
Total Heat Dissipation	3400 BTUs (max.)
Operating Temperature Range	0° C to 50° C (32° F to 122° F)
Storage Temperature Range	–25° C to +70° C (–13° F to 158° F)
Humidity	0 to 85% R.H. (non-condensing, operating, and storage)
Operating Altitude	0 to 3000 m (0 to 10,000 ft)
Address Resolution	More than 750,000 addresses

LED Indicators

The following table summarizes all LED indicators on the OmniCore routing switch.

LED Indicators

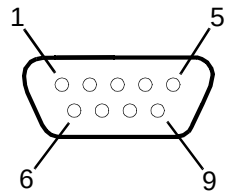
LED	Color	Description
% Utilization	Green/Yellow None	Current port activity is displayed. Port currently has no activity.
Active Link	Green None	Port is operational on an interface. Port is not operational on an interface.
Activity	Green None	Port is receiving or transmitting data. Port is not receiving or transmitting data.
Beacon	Green None	Ring is attempting to reestablish itself. Ring condition is normal.
Link (Link Integrity)	Green None	Connection is valid and operational. Connection is not valid or operational.
PWR	Green Amber None	Power supply is operational. Power supply is not operating properly (e.g., low AC input). Power supply is not operational.
Ring	Green None	Connection is valid and operational. Connection is not valid or operational.
RX	Green None	Port is receiving data. Port is not receiving data.
Select	Yellow None	Port activity is currently being displayed through the % Utilization LEDs. Port activity is not being displayed through the % Utilization LEDs.
Status	Green Amber None Flashing Green	Module/card is operational. Module/card is not operating properly. Module/card is not operational. Redundant card is ready.
TX	Green None	Port is transmitting data. Port is not transmitting data.
Wrap	Green None	Indicates a broken ring and the secondary ring is being used (DAS), or that the link is a SAS connection. Indicates both DAS rings are operational.

Connector Pin Assignments

This section outlines pin assignments for the serial modem and console ports on the EMM, and for the mini-DIN ports on the 2-port DAS FDDI interface module.

Console Port

The EMM console port uses a common 9-pin PC cable and connector, known as a DB-9 connector. The following pin assignments are for the console port only.

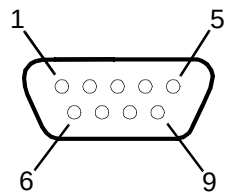


Console Port Pin Assignments

Pin	Function	Description
1	No connection	
2	Receive data	Data from DCE
3	Transmit data	Data from DTE
4	No connection	
5	Signal ground	Reference point for signals
6	No connection	
7	No connection	
8	No connection	
9	No connection	

Modem Port

The EMM modem port uses a common 9-pin PC cable and connector, known as a DB-9 connector. The following pin assignments are for the modem port only.

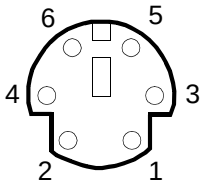


Modem Port Pin Assignments

Pin	Function	Description
1	Data carrier detect	Handshake from DCE
2	Receive data	Data from DCE
3	Transmit data	Data from DTE
4	Data transmit ready	Handshake from DTE
5	Signal ground	Reference point for signals
6	Data set ready	Handshake from DCE
7	Request to send	Handshake from DTE
8	Clear to send	Handshake from DCE
9	No connection	

Mini-DIN Port

The mini-DIN port uses a standard 6-pin DIN cable and connector. The following pin assignments are for the mini-DIN port only.



Mini-DIN Port Pin Assignments

Pin	Function
1	+5 V (secondary switch)
2	+5 V (primary switch)
3	GND (primary switch)
4	GND (secondary switch)
5	Bypass switch sense RTN
6	Bypass switch sense

Maximum Link Lengths

The following table outlines maximum link lengths for the various media supported by the OmniCore routing switch.

Maximum Link Lengths

PHY Types	Medium	Maximum Length
1000BASE-SX	MMF (Multi-Mode fiber)	50 µm: 550 m (1804 ft) 62.5 µm: 275 m (902 ft)
1000BASE-LX	MMF	50 and 62.5 µm: 550 m (1804 ft)
1000BASE-LX	SMF (Single Mode Fiber)	5 km (3 mi.)
1000BASE-LH	SMF	50 km (30 mi.)
100BASE-FX	MMF	2 km (1.2 mi.)
100BASE-FX	SMF	14 km (8.4 mi.)
100BASE-TX	Category 5 UTP	100 m (328 ft)
10BASE-T	Category 3 UTP	100 m (328 ft)
OC-3c POS	MMF	50 and 62.5 µm: 2 km (1.2 mi.)
OC-3c POS	SMF	15 km (9.3 mi.)
OC-12c POS	MMF	50 and 62.5 µm: 500 m (1640 ft.)
OC-12c POS	SMF	15 km (9.3 mi.)
FDDI	MMF	2 km (1.2 mi.)

Evaluating Power Budget for Optical Data Links

To design an efficient optical data link, you should evaluate the power budget. The power budget is the amount of light available to overcome attenuation in the optical link and to exceed the minimum power that the receiver requires to operate within its specifications. Proper operation of an optical data link depends on modulated light reaching the receiver with enough power to be correctly demodulated. Attenuation, caused by the passive media components (such as cables, cable splices, and connectors), is common to both multimode (MMF) and single-mode (SMF) fiber transmission.

The following variables reduce the power of the signal (light) transmitted to the receiver in multimode transmission:

- Chromatic dispersion (spreading of the signal in time because of the different speeds of light wavelengths)
- Modal dispersion (spreading of the signal in time because of the different propagation modes in the fiber)

Attenuation is significantly lower for optical fiber than for other media. For multimode transmission, chromatic and modal dispersion reduce the available power of the system by the combined dispersion penalty (dB). The power lost over the data link is the sum of the component, dispersion, and modal losses.

The following table lists the factors of attenuation and dispersion limits for typical optical-fiber cable.

Typical Optical-Fiber Link Attenuation

Limits	Single Mode/1300	Single Mode/1550	Multimode
Attenuation	0.5 dB/km	0.3dB/km	1.0 dB/km
Dispersion	No Limit	No Limit	500 MHz-km

Approximating the Multimode Power Margin

The LED used for a multimode transmission light source creates multiple propagation paths of light, each with a different path length and time requirement to cross the optical fiber, causing signal dispersion (smear). Higher order mode loss (HOL) results from light from the LED entering the fiber and being radiated into the fiber cladding.

A worst case estimate of power margin (PM) for multimode transmissions assumes minimum transmitter power (PT), maximum link loss (LL), and minimum receiver sensitivity (PR). The worst case analysis provides a margin of error, although not all of the parts of an actual system will operate at the worst case levels. The signal must meet the worst case optical power parameters listed in the following table.

OmniCore Optical Power Requirements

Module	Minimum Transmitter Power (PT)	Minimum Receiver Sensitivity (PR)
SX GBIC module (850NM, MMF), P.N. OC-5000-1109	–10.0 dBm avg.	–17 dBm avg.
All OC-5000 interface modules (cards) with fixed SX Ports	–9.5 dBm avg.	–17 dBm avg.

OmniCore Optical Power Requirements (Continued)

LX GBIC module (1300NM, SMF), P.N. OC-5000-1110	–12.0 dBm avg. SMF	–20 dBm avg.
All OC-5000 interface modules (cards) with fixed LX Ports	–9.5 dBm avg. SMF	–21 dBm avg.
LH GBIC module (1550NM, SMF), P.N. OC-5000-1111	–0.0 dBm avg. SMF	–22 dBm avg.
All OC-5000 interface modules (cards) with fixed LH Ports	–5.2 dBm avg. SMF	–21 dBm avg.

The Power Budget (PB) is the maximum possible amount of power transmitted. The following equation shows the calculation of the power budget for multimode, worst case:

1. PB = PT – PR

2. PB = –18.5 – (–30)

3. PB = –18.5 + 30

4. PB = 11.5 dB

The power margin (PM) calculation is derived from the power budget (PB) minus the link loss (LL), as follows:

- PM = PB – LL

If the power margin is a positive value, as a rule, the link will work.

The following table lists the factors that contribute to link loss and the estimate of the link loss value attributable to those factors.

Estimating Link Loss

Link Loss Factor	Estimate of Link Loss Value
Higher order mode losses	0.5 dB
Clock recovery module	1 dB
Modal and chromatic dispersion	Dependent on fiber and wavelength used
Connector	0.5 dB
Splice	0.5 dB
Multimode fiber attenuation Single mode fiber attenuation	3 dB/km 0.3 dB/km

After calculating the power budget minus the data link loss, the result should be greater than zero; this is the power margin. Results less than zero may have insufficient power to operate the receiver.

Multimode Power Margin Example

The following is an example of a multimode (MMF) power margin (PM) calculation using an Alcatel SX GBIC module and the following variables:

- Length of multimode link = 3 km, with a loss of 3.0 dB per km (see table *Estimating Link Loss* on page C-7) = 9 dB total
- 4 connectors, each with a loss of 0.5 dB = 2 dB total
- 3 splices, each with a loss of 0.5 dB = 1.5 dB total
- Higher order loss (HOL) of 0.5 dB
- Clock recovery module (CRM), with a loss of 1.0 dB

1. Estimate link loss (LL):

   LL = 9 dB + 2 dB + 1.5 dB + 0.5 dB + 1 dB = 14 dB

2. Estimate the power budget of the SX GBIC module (see table *OmniCore Optical Power Requirements* on page C-6):

   PB = PT – PR = –10 – (–17) = 7

3. Estimate the power margin (PM) as follows:

   PM = [PB] – [LL] = 7 dB – 14 = –7 dB

The negative value 2.5 dB indicates that this link does not have sufficient power for transmission. In this instance, we recommend the use of a fiber optic repeater or the use of LX or LH single mode fiber.

Single-Mode Power Margin Example

Example 1

The following is an example of a single-mode power margin calculation using an Alcatel LH GBIC module to link two buildings, 11 kilometers apart (with a fiber attenuation loss of 0.3 dB/km) connected through a patch panel in an intervening building with a total of 12 connectors (each connector has a connector loss of 0.5 dB).

1. Estimate link loss (LL), see table *Estimating Link Loss* on page C-7:

   LL = 11 km (0.3 dB/km) + 12 (0.5 dB) = 9.3 dB

2. Estimate the power budget of the LH GBIC module (see table *OmniCore Optical Power Requirements* on page C-6):

   PB = PT – PR = 22

3. Estimate the power margin (PM) as follows:

   PM = [PB] – [LL] = 22 dB – 9.3 = 12.7 dB

The positive value of 12.7 dB indicates that this link would have sufficient power for transmission and is not in excess of the maximum receiver input power.

Example 2

The following is an example of a single-mode power margin calculation using an Alcatel LX GBIC module to link two buildings, 2 kilometers apart (with a fiber attenuation loss of 0.3 dB/km) connected through a patch panel in an intervening building with a total of 6 connectors (each connector has a connector loss of 0.5 dB).

1. Estimate link loss (LL), see table *Estimating Link Loss* on page C-7:

   LL = 2 km (0.3 dB/km) + 6 (0.5 dB) = 3.6 dB

2. Estimate the power budget (PB) of the LX GBIC module (see table *OmniCore Optical Power Requirements* on page C-6):

   PB = PT – PR = 8

3. Estimate the power margin (PM) as follows:

   PM = PB – LL = 8 dB – 3.6 = 4.4 dB

The positive value of 4.4 dB indicates that this link would have sufficient power for transmission and is not in excess of the maximum receiver input power.

Interface Modules Part Numbers

To Determine the Interface Modules Installed

Use the *slot show* command to determine the interface modules installed in the OmniCore routing switch. For example:

```
OmniCore> slot show
#  Type      #Ports  Uptime       ImageVersion        HW Version      Oper Status
-  ---------------  ------       ------------        ----------      ---- ------
1  NONE          0   9 d, 22:15   NONE                NONE            down enable
2  EMM (M)       0   9 d, 22:15   3.3.0r2-11/27/2000  300-1119-1, B   up   enable
3  Eth-TX       20   9 d, 22:14   3.3.0r2-11/27/2000  300-1057-1, B   up   enable
4  Gig-SX        2   9 d, 22:14   3.3.0r2-11/27/2000  300-1058-1, C   up   enable
5  POS-OC3       2   9 d, 22:15   3.3.0r2-11/27/2000  300-1059-1, A   up   enable
6  FDDI          2   9 d, 22:15   3.3.0r2-11/27/2000  300-1064-1, B   up   enable
7  POS-OC12      2   9 d, 22:15   3.3.0r2-11/27/2000  300-1066-1, A   up   enable
   Number of Entries Displayed: 7
```

The “Type” column shows the type of interface module installed. To locate information on each interface module installed, cross reference its subassembly part number listed in the "HW Version" column with the part number listed in the following OmniCore or Legacy table.

OmniCore Interface Module Subassembly Part Numbers

Part Number	Description	ASIC[a] Chipset	Min. Software[b]
1000BASE Interface Modules			
300-1058-1	2-Port 1000BASE-SX Gigabit Ethernet	ARL2, GPM2, GMAC4	2.2+
300-1061-1	2-Port/2-Redundant Port 1000BASE-SX Gigabit Ethernet	ARL2, GPM2, GMAC4	2.2+
300-1063-1	2-Port 1000BASE-LX Gigabit Ethernet	ARL2, GPM2, GMAC4	2.2+
300-1062-1	2-Port/2-Redundant Port 1000BASE-LX Gigabit Ethernet	ARL2, GPM2, GMAC4	2.2+
300-1067-1	2-Port 1000BASE-LH Gigabit Ethernet	ARL2, GPM2, GMAC4	2.2+
300-1079-3	2 GBIC-Port/2-Redundant GBIC-Port, 1000BASE Gigabit Ethernet, Large Table (LT)	ARL4, GPM2, GMAC4	3.2+
300-1099-2	2 GBIC-Port/2-Redundant GBIC-Port, 1000Base Gigabit Ethernet, Small Table (ST)	ARL4, GPM2, GMAC4	3.2+
300-1068-1	6-Port 1000BASE-SX Gigabit Server (legacy)	ARL2, LPM3, GMAC4	2.6+
300-1069-1	6-Port 1000BASE-SX Gigabit Server	ARL3, LPM4, GMAC5	2.6+
300-1104-2	6 GBIC-Port 1000BASE Gigabit Server, ST	ARL4, LPM3, GMAC5	3.2+
300-1093-2	6 GBIC-Port 1000BASE Gigabit Server, LT	ARL4, LPM3, GMAC5	3.2+
10/100BASE and 100BASE Interface Modules			
300-1065-1	10-Port 100BASE-FX Fast Ethernet, Multimode Fiber (MMF)	ARL2, LPM3, DMAC	2.2+
300-1072-2	10-Port 100BASE-FX Fast Ethernet, Single Mode Fiber (SMF)	ARL2, LPM3, DMAC	2.2+

OmniCore Interface Module Subassembly Part Numbers (Continued)

Part Number	Description	ASIC[a] Chipset	Min. Software[b]
300-1080-1	20-Port 100BASE-FX Fast Ethernet, MMF	ARL2, LPM3, DMAC	2.2+
300-1097-2	20-Port 100BASE-FX Fast Ethernet, MMF, Large Table (LT)	ARL4, LPM3, DMAC	3.2+
300-1101-2	20-Port 100BASE-FX Fast Ethernet, MMF, Small Table (ST)	ARL4, LPM3, DMAC	3.2+
300-1102-2	20-Port 100BASE-FX Fast Ethernet, SMF, LT	ARL4, LPM3, DMAC	3.2+
300-1103-2	20-Port 100BASE-FX Fast Ethernet, SMF, ST	ARL4, LPM3, DMAC	3.2+
300-1056-1	20-Port 10/100BASE-TX Fast Ethernet (legacy)	ARL2, LPM3, DMAC	2.2+
300-1057-1	20-Port 10/100BASE-TX Fast Ethernet	ARL3, LPM4, DMAC	2.6+
300-1096-3	20-Port 10/100BASE-TX, LT	ARL4, LPM3, DMAC	3.2+
300-1100-3	20-Port 10/100BASE-TX, ST	ARL4, LPM3, DMAC	3.2+
OC-3c POS Interface Modules			
300-1059-1	2-Port OC-3c POS, Single Mode Fiber-Intermediate Reach (SMF-IR)	ARL2, GPM2	2.6+
300-1115-2	2-Port OC-3c POS, SMF-IR, LT	ARL4, GPM2	3.2+
300-1071-1	2-Port OC-3c POS, Multimode Fiber-Short Reach (MMF-SR)	ARL2, GPM2	2.6+
300-1116-2	2-Port OC-3c POS, MMF-SR, LT	ARL4, GPM2	3.2+
OC-12c POS Interface Modules			
300-1066-1	2-Port OC-12c POS, SMF-IR	ARL2, GPM2	2.2+
300-1070-1	2-Port OC-12c POS, MMF-SR	ARL2, GPM2	2.2+
300-1098-2	2-Port OC-12c POS, MMF-SR, LT	ARL4, GPM2	3.2+
300-1114-2	2-Port OC-12c POS, SMF-IR, LT	ARL4, GPM2	3.2+
DAS/SAS Interface Module			
300-1064-1	2-Port DAS/SAS FDDI	ARL2, GPM2	2.2+
Enterprise Management Modules (EMM)			
300-1055-1	OC-5052, Primary EMM with 1000BASE-SX Gigabit Ethernet (non-GBIC) Port, 64 MB	ARL2, GPM2, GMAC4, ARGUS	2.2+
300-1060-1	OC-5000, Secondary EMM, 64 MB (w/o 1000BASE port)	ARL2, GPM2, ARGUS	2.2+
300-1090-1	OC-5000, Secondary EMM, 256 MB (w/o 1000BASE port)	ARL2, GPM2, ARGUS	2.2+

OmniCore Interface Module Subassembly Part Numbers (Continued)

Part Number	Description	ASIC[a] Chipset	Min. Software[b]
300-1092-1	OC-5052, Primary EMM with 1000BASE-SX Gigabit Ethernet (non-GBIC) Port, 256 MB	ARL2, GPM2, GMAC4, ARGUS	2.2+
300-1095-2	OC-5000, EMM with Gigabit Ethernet GBIC-Port, 256 MB	ARL4, GPM2, GMAC4, ARGUS	3.2+
300-1119-1	OC-5000, Secondary EMM, 256MB (w/o 1000BASE port)	ARL2, GPM2, ARGUS	3.2+
300-1121-1	OC-5052, Primary EMM with 1000BASE-SX Gigabit Ethernet (non-GBIC) Port, 256 MB	ARL2, GPM2, GMAC4, ARGUS	3.2+

a. Application Specific Integrated Circuit (ASIC): Address Resolution Logic (ARL), Gigabit Packet Manager (GPM), Dec MAC (DMAC), Gig MAC (GMAC), ARGUS, Legacy Packet Manager (LPM)
b. Minimum OmniCore software release required for operation ("+" = "or greater").

Legacy Interface Module Subassembly Part Numbers

Part Number	Description	ASIC[a] Chipset	Min. Software[b]
EMM with Gigabit Port			
300-1010-6	EMM with 1000BASE-SX port	ARL1, GPM1, GMAC3, Argus1	1.0.1+
300-1010-7	EMM with 1000BASE-SX port	ARL2, GPM1, GMAC3, Argus1	1.1.1+
300-1010-8	EMM with 1000BASE-SX port	ARL2, GPM2, GMAC3, Argus1	2.0.0+
300-1010-9	EMM with 1000BASE-SX port	ARL2, GPM2, GMAC3, Argus1	2.0.0+
300-1053-1	EMM with 1000BASE-SX port	ARL2, GPM2, GMAC4, Argus1	2.2.0+
300-1120-1	EMM with 1000BASE-SX port, 256 MB	ARL2, GPM2, GMAC4, Argus1	2.2.0+
EMM without Gigabit Port			
300-1016-5	EMM without 1000BASE-SX port	ARL1, GPM1, Argus1	1.0.1+
300-1016-6	EMM without 1000BASE-SX port	ARL2, GPM1, Argus1	1.1.1+
300-1016-7	EMM without 1000BASE-SX port	ARL2, GPM2, Argus1	2.0.0+
300-1016-8	EMM without 1000BASE-SX port	ARL2, GPM2, Argus1	2.0.0+
300-1118-1	EMM without 1000BASE-SX port, 256 MB	ARL2, GPM2, Argus1	2.0.0+
Gigabit 2-Port Blades			
300-1003-1	1000BASE-SX	ARL1, GPM1, GMAC3	1.0.1+
300-1003-2	1000BASE-SX	ARL2, GPM1, GMAC3	1.1.1+
300-1003-3	1000BASE-SX	ARL2, GPM2, GMAC3	2.0.0+
300-1003-4	1000BASE-SX	ARL2, GPM2, GMAC4	2.2.0+
300-1058-1	1000BASE-SX	ARL2, GPM2, GMAC4	2.2.0+

Legacy Interface Module Subassembly Part Numbers (Continued)

Part Number	Description	ASIC[a] Chipset	Min. Software[b]
300-1004-1	1000BASE-LX	ARL1, GPM1, GMAC3	1.0.1+
300-1004-2	1000BASE-LX	ARL2, GPM1, GMAC3	1.1.1+
300-1004-3	1000BASE-LX	ARL2, GPM2, GMAC3	2.0.0+
300-1004-4	1000BASE-LX	ARL2, GPM2, GMAC4	2.2.0+
300-1031-1	1000BASE-LH	ARL2, GPM1, GMAC3	1.1.1+
300-1031-2	1000BASE-LH	ARL2, GPM2, GMAC3	2.0.0+
300-1031-3	1000BASE-LH	ARL2, GPM2, GMAC4	2.2.0+
300-1067-1	1000BASE-LH	ARL2, GPM2, GMAC4	2.2.0+
300-1006-1	1000BASE-SX-RL	ARL1, GPM1, GMAC3	1.0.1+
300-1006-2	1000BASE-SX-RL	ARL2, GPM1, GMAC3	1.1.1+
300-1006-3	1000BASE-SX-RL	ARL2, GPM2, GMAC3	2.0.0+
300-1006-4	1000BASE-SX-RL	ARL2, GPM2, GMAC4	2.2.0+
300-1061-1	1000BASE-SX-RL	ARL2, GPM2, GMAC4	2.2.0+
300-1007-1	1000BASE-LX-RL	ARL1, GPM1, GMAC3	1.0.1+
300-1007-2	1000BASE-LX-RL	ARL2, GPM1, GMAC3	1.1.1+
300-1007-3	1000BASE-LX-RL	ARL2, GPM2, GMAC3	2.0.0+
300-1007-4	1000BASE-LX-RL	ARL2, GPM3, GMAC4	2.2.0+
300-1062-1	1000BASE-LX-RL	ARL2, GPM3, GMAC4	2.2.0+
6-Port Gigabit Server Blades			
300-1029-1	1000BASE-SX 6 port Server	ARL2, LPM2, DMAC1	2.0.0+
300-1029-2	1000BASE-SX 6 port Server	ARL2, LPM3, GMAC3	2.0.0+
300-1029-3	1000BASE-SX 6 port Server	ARL2, LPM3, GMAC4	2.2.0+
300-1068-1	1000BASE-SX 6 port Server	ARL2, LPM3, GMAC4	2.2.0+
6-Port Gigabit Server Blades LMTU			
300-1046-2	1000BASE-SX 6 PORT LMTU	ARL3, LPM4, GMAC5	2.6.0+
300-1069-1	1000BASE-SX 6 PORT LMTU	ARL3, LPM4, GMAC5	2.6.0+
Legacy 10/100 Blades			
300-1005-1	100BASE-TX	ARL1, LPM2, DMAC1	1.0.1+
300-1005-2	100BASE-TX	ARL1, LPM2, DMAC1	1.0.1+
300-1005-3	100BASE-TX	ARL2, LPM2, DMAC1	1.1.1+

Legacy Interface Module Subassembly Part Numbers (Continued)

Part Number	Description	ASIC[a] Chipset	Min. Software[b]
300-1005-4	100BASE-TX	ARL2, LPM3, DMAC1	2.0.0+
10/100 Blades LMTU Discard Aware			
300-1051-1	100BASE-TX	ARL3, LPM4, DMAC1	2.6.0+
FDDI Blades			
300-1012-2	FDDI	ARL2, GPM1	2.2.0+
300-1012-3	FDDI	ARL2, GPM2	2.2.0+
POS Single-Mode Fiber Blades			
300-1039-1	POS OC-3 SMF-IR	ARL2, GPM2	2.6.0+
300-1039-2	POS OC-3 SMF-IR	ARL2, GPM2	2.6.0+
300-1039-3	POS OC-3 SMF-IR	ARL2, GPM2	2.6.0+
300-1039-4	POS OC-3 SMF-IR	ARL2, GPM2	2.6.0+
300-1059-1	POS OC-3 SMF-IR	ARL2, GPM2	2.6.0+
300-1026-1	POS OC-12 SMF-IR	ARL2, GPM2	2.6.0+
300-1026-2	POS OC-12 SMF-IR	ARL2, GPM2	2.6.0+
300-1026-3	POS OC-12 SMF-IR	ARL2, GPM2	2.6.0+
300-1026-4	POS OC-12 SMF-IR	ARL2, GPM2	2.6.0+
POS Multi-Mode Fiber Blades			
300-1040-1	POS OC-3 MMF-SR	ARL2, GPM2	2.2.0+
300-1040-2	POS OC-3 MMF-SR	ARL2, GPM2	2.2.0+
300-1040-3	POS OC-3 MMF-SR	ARL2, GPM2	2.2.0+
300-1040-4	POS OC-3 MMF-SR	ARL2, GPM2	2.2.0+
300-1071-1	POS OC-3 MMF-SR	ARL2, GPM2	2.2.0+
300-1041-1	POS OC-12 MMF-SR	ARL2, GPM2	2.2.0+
300-1041-2	POS OC-12 MMF-SR	ARL2, GPM2	2.2.0+
300-1041-3	POS OC-12 MMF-SR	ARL2, GPM2	2.2.0+
300-1041-4	POS OC-12 MMF-SR	ARL2, GPM2	2.2.0+
100BASE-FX			
300-1019-2	100BASE-FX 10 port MMF	ARL1, LPM2, DMAC1	2.0.0+
300-1019-3	100BASE-FX 10 port MMF	ARL2, LPM2, DMAC1	2.0.0+
300-1019-4	100BASE-FX 10 port MMF	ARL2, LPM3, DMAC1	2.0.0+

Legacy Interface Module Subassembly Part Numbers (Continued)

Part Number	Description	ASIC[a] Chipset	Min. Software[b]
300-1019-5	100BASE-FX 10 port MMF	ARL2, LPM2, DMAC1	2.0.0+
300-1019-6	100BASE-FX 10 port MMF	ARL2, LPM3, DMAC1	2.0.0+
300-1065-1	100BASE-FX 10 port MMF	ARL2, LPM3, DMAC1	2.0.0+
300-1034-1	100BASE-FX 10 port SMF	ARL2, LPM2, DMAC1	2.0.0+
300-1034-2	100BASE-FX 10 port SMF	ARL2, LPM3, DMAC1	2.0.0+
300-1034-3	100BASE-FX 10 port SMF	ARL2, LPM3, DMAC1	2.0.0+
300-1034-4	100BASE-FX 10 port SMF	ARL2, LPM3, DMAC1	2.0.0+
300-1034-5	100BASE-FX 10 port SMF	ARL2, LPM3, DMAC1	2.0.0+
300-1072-2	100BASE-FX 10 port SMF	ARL2, LPM3, DMAC1	2.6.0+
300-1035-1	100BASE-FX 20 port MMF	ARL2, LPM3, DMAC1	2.6.0+

a. Application Specific Integrated Circuit (ASIC): Address Resolution Logic (ARL), Gigabit Packet Manager (GPM), Dec MAC (DMAC), Gig MAC (GMAC), ARGUS, Legacy Packet Manager (LPM)
b. Minimum PowerRail routing switch software-release required for operation ("+" = "or greater").

To Determine the Current Software Version

To determine what software version the OmniCore routing switch is currently running, use the CLI *system show* command. In the example below, the software version is 3.3.0r4 (Version row).

```
OmniCore> system show
Name                 :PR-5200
Contact              :Alcatel Internetworking,  1-800-995-2696
Location             :11707 E.Sprague Suite 101 Spokane WA-99206
Version              :3.3.0r4 - (date)
Hardware Version     :300-1053-1, C
Chassis Type         :PR-5200
System Up Time       :00:00:16
System RAM           :64 Mbytes
% PBNs in Use        :less than 1%
Run-time Diagnostics :enable
```