



## APPENDIX

## B

# Cards and Pluggables

This appendix provides a list of Supported Pluggables supported in CTP ([Table B-1](#)) and the cards supported by NCS 2015 ([Table B-2](#)).

**Table B-1      Supported Pluggables**

Card	Supported Pluggables	Default Pluggable
10G-XR	<ul style="list-style-type: none"><li>ONS-XC-10G</li><li>ONS-XC-10G-C</li><li>ONS-XC-10G-96C</li></ul>	ONS-XC-10G-C
GE-XP	<ul style="list-style-type: none"><li>ONS-XC-10G</li><li>ONS-XC-10G-C</li><li>ONS-XC-10G-96C</li><li>ONS-XC-10G-EP30.3 through ONS-XC-10G-EP61.4</li></ul>	ONS-XC-10G-C
GE-XPE	<ul style="list-style-type: none"><li>ONS-XC-10G</li><li>ONS-XC-10G-C</li><li>ONS-XC-10G-96C</li><li>ONS-SC-EOP1</li><li>ONS-XC-10G-EP30.3 through ONS-XC-10G-EP61.4</li><li>ONS-SI-GE-EX</li></ul>	ONS-XC-10G-C
10GE-XP	<ul style="list-style-type: none"><li>ONS-XC-10G</li><li>ONS-XC-10G-C</li><li>ONS-XC-10G-96C</li><li>ONS-XC-10G-EP30.3 through ONS-XC-10G-EP61.4</li></ul>	ONS-XC-10G-C
10GE-XPE	<ul style="list-style-type: none"><li>ONS-XC-10G</li><li>ONS-XC-10G-C</li><li>ONS-XC-10G-96C</li><li>ONS-XC-10G-EP30.3 through ONS-XC-10G-EP61.4</li></ul>	ONS-XC-10G-C

**Table B-1** Supported Pluggables (continued)

Card	Supported Pluggables	Default Pluggable
ADM-10G	<ul style="list-style-type: none"> <li>• ONS-XC-10G</li> <li>• ONS-XC-10G-C</li> <li>• ONS-XC-10G-96C</li> <li>• ONS-XC-10G-EP30.3 through ONS-XC-10G-EP61.4</li> <li>• ONS-SI-GE-EX</li> </ul>	ONS-XC-10G-C
OTU-2_XP	<ul style="list-style-type: none"> <li>• ONS-XC-10G</li> <li>• ONS-XC-10G-C</li> <li>• ONS-XC-10G-96C</li> <li>• ONS-XC-10G-EP30.3 through ONS-XC-10G-EP61.4</li> </ul>	ONS-XC-10G-C
40G DQPSK MXP	<ul style="list-style-type: none"> <li>• ONS-XC-10G-1470 through ONS-XC-10G-1610</li> <li>• ONS-XC-10G-S1</li> <li>• ONS-XC-10G-I2</li> <li>• ONS-XC-10G-L2</li> <li>• ONS-XC-10G-C</li> <li>• ONS-XC-10G-96C</li> <li>• ONS-XC-8G-SM</li> <li>• ONS-XC-8G-MM</li> <li>• ONS-XC-10G-SR-MM</li> <li>• ONS-XC-10G-EP30.3= through ONS-XC-10G-EP61.4=</li> </ul>	ONS-XC-10G-C
40G CP-DQPSK MXP	<ul style="list-style-type: none"> <li>• ONS-XC-10G-1470 through ONS-XC-10G-1610</li> <li>• ONS-XC-10G-S1</li> <li>• ONS-XC-10G-I2</li> <li>• ONS-XC-10G-L2</li> <li>• ONS-XC-10G-C</li> <li>• ONS-XC-10G-96C</li> <li>• ONS-XC-8G-SM</li> <li>• ONS-XC-8G-MM</li> <li>• ONS-XC-10G-SR-MM</li> <li>• ONS-XC-10G-EP30.3= through ONS-XC-10G-EP61.4=</li> </ul>	ONS-XC-10G-C

**Table B-1      Supported Pluggables (continued)**

<b>Card</b>	<b>Supported Pluggables</b>	<b>Default Pluggable</b>
40G CP-DQPSK ME MXP	<ul style="list-style-type: none"><li>• ONS-XC-10G-1470 through ONS-XC-10G-1610</li><li>• ONS-XC-10G-S1</li><li>• ONS-XC-10G-I2</li><li>• ONS-XC-10G-L2</li><li>• ONS-XC-10G-C</li><li>• ONS-XC-10G-96C</li><li>• ONS-XC-8G-SM</li><li>• ONS-XC-8G-MM</li><li>• ONS-XC-10G-SR-MM</li><li>• ONS-XC-10G-EP30.3= through ONS-XC-10G-EP61.4=</li></ul>	ONS-XC-10G-C

**Table B-1** Supported Pluggables (continued)

Card	Supported Pluggables	Default Pluggable
AR-MXP	<ul style="list-style-type: none"> <li>• ONS-XC-10G-C</li> </ul>	ONS-XC-10G-C
AR-XP	<ul style="list-style-type: none"> <li>• ONS-XC-10G-96C</li> <li>• ONS-XC-10G-S1</li> <li>• ONS-XC-10G-I2</li> <li>• ONS-XC-10G-L2</li> <li>• ONS-XC-8G-SM</li> <li>• ONS-XC-8G-MM</li> <li>• ONS-XC-10G-EP30.3 through ONS-XC-10G-EP61.4</li> <li>• ONS-SE-200-MM</li> <li>• ONS-SI-155-SR-MM</li> <li>• ONS-SI-622-SR-MM</li> <li>• ONS-SC-2G-xx.x</li> <li>• ONS-SC-2G-xxxx=</li> <li>• ONS-SE-4G-MM</li> <li>• ONS-SE-4G-SM</li> <li>• ONS-SE-100BX10U</li> <li>• ONS-SE-100BX10D</li> <li>• ONS-SE-GE-BXU</li> <li>• ONS-SE-GE-BXD</li> <li>• ONS-SE-ZE-EL</li> <li>• ONS-SI-100-FX</li> <li>• ONS-SI-100-LX10</li> <li>• ONS-SI-GE-LX</li> <li>• ONS-SI-GE-SX</li> <li>• ONS-SI-GE-ZX</li> <li>• ONS-SI-GE-EX (AR-XP only)</li> </ul>	

**Table B-1**      ***Supported Pluggables (continued)***

<b>Card</b>	<b>Supported Pluggables</b>	<b>Default Pluggable</b>
AR-MXP AR-XP	<ul style="list-style-type: none"> <li>• ONS-SI-155-I1</li> <li>• ONS-SI-155-L2</li> <li>• ONS-SI-622-I1</li> <li>• ONS-SI-622-L1</li> <li>• ONS-SI-622-L2</li> <li>• ONS-SC-4G-xx.x</li> <li>• ONS-SI-2G-L1</li> <li>• ONS-SI-2G-L2</li> <li>• ONS-SI-2G-S1</li> <li>• ONS-SE-Z1</li> <li>• ONSSI-155-L1</li> <li>• ONS-SE-155-xxxx</li> <li>• ONS-SC-155-EL</li> <li>• ONS-SC-4G-xx.x</li> <li>• ONS-SC-HD3GV-TX</li> <li>• ONS-SC-HD3GV-RX</li> <li>• ONS-SI-155-L1</li> <li>• ONS-SE-100-BX10U</li> <li>• ONS-SE-100-BX10D</li> </ul>	—
100G-LC-C 100G-ME-C 100G-CK-ME-C	<ul style="list-style-type: none"> <li>• ONS-CXP-100G-SR10</li> </ul>	ONS-CXP-100G-SR10
100G-CK-LC-C 100GS-CK-LC 200G-CK-LC	<ul style="list-style-type: none"> <li>• CPAK-100G-SR10</li> <li>• CPAK-100G-LR4</li> <li>• CPAK-100G-SR4 (100GE)</li> </ul>	CPAK-100G-SR10

**Table B-1** Supported Pluggables (continued)

Card	Supported Pluggables	Default Pluggable
100GS-CK-LC + 10X10G-LC 200G-CK-LC + 10X10G-LC	<ul style="list-style-type: none"> <li>• ONS-SC+-10G-SR</li> <li>• ONS-SC+-10G-ER</li> <li>• ONS-SC+-10G-LR</li> <li>• ONS-SC+-10G-ZR</li> <li>• ONS-SC+-10G-xx.x</li> <li>• ONS-SC+-10GEPxx.x</li> <li>• ONS-SC+-10G-C</li> <li>• ONS-SC+-10G-CU-1</li> <li>• ONS-SC+-10G-CU-3</li> <li>• ONS-SC+-10G-CU-5</li> <li>• ONS-SC+-10G-CU-7</li> <li>• ONS-SC+-10G-xxxx</li> </ul>	—
200G-CK-LC + MR-MXP + 10X10G-LC	<p><b>MR-MXP (SFP+):</b></p> <ul style="list-style-type: none"> <li>• ONS-SC+-10G-SR=</li> <li>• ONS-SC+-10G-LR=</li> <li>• ONS-SC+-10G-C=(10G Tunable)</li> <li>• ONS-SC+-10G-EP30.3= through</li> <li>• ONS-SC+-10G-EP61.8=(10G DWDM)</li> </ul> <p><b>MR-MXP (QSFP):</b></p> <ul style="list-style-type: none"> <li>• ONS-QSFP-40G-SR4</li> <li>• ONS-QSFP-4x10G-LR</li> </ul> <p><b>10X10G-LC:</b></p> <ul style="list-style-type: none"> <li>• ONS-SC+-10G-SR</li> <li>• ONS-SC+-10G-ER</li> <li>• ONS-SC+-10G-LR</li> <li>• ONS-SC+-10G-ZR</li> <li>• ONS-SC+-10G-xx.x</li> <li>• ONS-SC+-10GEPxx.x</li> <li>• ONS-SC+-10G-C</li> <li>• ONS-SC+-10G-CU-1</li> <li>• ONS-SC+-10G-CU-3</li> <li>• ONS-SC+-10G-CU-5</li> <li>• ONS-SC+-10G-CU-7</li> <li>• ONS-SC+-10G-xxxx</li> <li>• ONS-QSFP-4x10G-LR</li> <li>• ONS-QSFP-40G-SR4</li> </ul>	—

**Table B-1** Supported Pluggables (continued)

Card	Supported Pluggables	Default Pluggable
200G-CK-LC + MR-MXP with FEC/EFEC/SD-FEC	<b>MXP-100G:</b> <ul style="list-style-type: none"> <li>• ONS-SC+-10G-SR=</li> <li>• ONS-SC+-10G-LR=</li> <li>• ONS-SC+-10G-C</li> <li>• ONS-SC+-10G-EPxx.x</li> <li>• ONS-QSFP-40G-SR4</li> <li>• ONS-QSFP-4x10G-LR</li> </ul> <b>TXP-100G:</b> <ul style="list-style-type: none"> <li>• CPAK-100G-SR10</li> <li>• CPAK-100G-LR4</li> </ul> <b>100GE</b> <ul style="list-style-type: none"> <li>• CPAK-100G-SR4</li> </ul>	—
200G-CK-LC + MR-MXP + MR-MXP with SD-FEC	<b>40GE</b> QSFP-40G-LR4	—
200G-CK-LC + MR-MXP (200G Mxp 100G+10x10G Mode) with SD-FEC_20	<b>100GE</b> <ul style="list-style-type: none"> <li>• CPAK-100G-SR4</li> <li>• CPAK-100G-SR10</li> <li>• CPAK-100G-LR4</li> </ul> <b>10GE LAN PHY for MR-MXP (SFP+)</b> <ul style="list-style-type: none"> <li>• ONS-SC+-10G-LR</li> <li>• ONS-SC+-10G-SR</li> <li>• ONS-SC+-10G-C</li> <li>• ONS-SC+-10G-EP</li> </ul> <b>10GE LAN PHY for MR-MXP (QSFP)</b> <ul style="list-style-type: none"> <li>• ONS-QSFP-40G-SR4</li> <li>• ONS-QSFP-4x10G-LR</li> </ul>	—

**Table B-1** Supported Pluggables (continued)

Card	Supported Pluggables	Default Pluggable
10x10G-LC	<ul style="list-style-type: none"> <li>• ONS-SC+-10G-ER</li> <li>• ONS-SC+-10G-LR</li> <li>• ONS-SC+-10G-SR</li> <li>• ONS-SC+-10G-ZR</li> <li>• ONS-SC+-10G-30.3 through ONS-SC+-10G-61.4</li> <li>• ONS-SC+-10GEP-30.3 through ONS-SC+-10GEP-61.4</li> <li>• ONS-SC+-10G-CU-1</li> <li>• ONS-SC+-10G-CU-3</li> <li>• ONS-SC+-10G-CU-5</li> <li>• ONS-SC+-10G-CU-7</li> <li>• ONS-SC+-10G-C</li> <li>• ONS-SC+-10G-xxxx</li> </ul>	ONS-SC+-10G-SR
WSE	<ul style="list-style-type: none"> <li>• ONS-SC+-10G-ER</li> <li>• ONS-SC+-10G-LR</li> <li>• ONS-SC+-10G-SR</li> <li>• ONS-SC+-10G-ZR</li> <li>• ONS-SC+-10G-30.3 through ONS-SC+-10G-61.4</li> <li>• ONS-SC+-10GEP-30.3 through ONS-SC+-10GEP-61.4</li> <li>• ONS-SC+-10G-CU-1</li> <li>• ONS-SC+-10G-CU-3</li> <li>• ONS-SC+-10G-CU-5</li> <li>• ONS-SC+-10G-CU-7</li> <li>• ONS-SC+-10G-C</li> </ul>	ONS-SC+-10GEP-XX
CFP-LC	<ul style="list-style-type: none"> <li>• ONS-CC-100G-LR4</li> <li>• ONS-CC-100GE-LR4</li> <li>• ONS-CC-40G-LR4</li> <li>• ONS-CC-40G-FR</li> <li>• CFP-40G-SR4</li> <li>• CFP-100G-SR10</li> </ul>	ONS-CC-100G-LR4 for OTU4 ONS-CC-100GE-LR4 for 100GE LAN PHY ONS-CC-40G-LR4= for 40GE LAN PHY or OTU3

**Table B-1** Supported Pluggables (continued)

Card	Supported Pluggables	Default Pluggable
MXP_MR_10DMEX	<ul style="list-style-type: none"> <li>• ONS-SE-G2F-SX</li> <li>• ONS-SE-G2F-LX</li> <li>• ONS-SI-GE-ZX</li> <li>• ONS-SE-4G-MM</li> <li>• ONS-SE-4G-SM</li> <li>• ONS-SI-GE-EX</li> </ul>	ONS-SE-G2F-SX for Gigabit ethernet, Fiber Channel 2G, 2G-FICON, 1G-FICON, Fiber Channel. ONS-SE-4G-MM for 4G-FICON, Fiber Channel 4G. ONS-SE-G2F-LX for ISC-Compact, ISC-Peer-1G, ISC-Peer-2g
MXP_MR_10DME	<ul style="list-style-type: none"> <li>• ONS-SE-G2F-LX</li> <li>• ONS-SE-G2F-SX</li> <li>• ONS-SE-ZE-EL</li> <li>• SFP-GE+-LX</li> <li>• SFP-GEFC-SX</li> <li>• ONS-SI-GE-ZX</li> <li>• ONS-SI-GE-EX</li> <li>• ONS-SE-4G-MM</li> <li>• ONS-SE-4G-SM</li> </ul>	ONS-SE-G2F-LX for Gigabit ethernet, Fiber Channel 2G, 2G-FICON, 1G-FICON, Fiber Channel, ISC-Compact, ISC-Peer-1G, ISC-Peer-2g. ONS-SE-4G-MM for 4G-FICON, Fiber Channel 4G.

Table B-2 lists the cards supported by Cisco NCS 2015.


**Note**

You must upgrade the cards supported in Cisco NCS 2015 M15 chassis to Release 10.5 or Release 10.5.2 before you use them on the M15 chassis.

**Table B-2** Cards Supported by NCS 2015

Interface Type	Card	Release
<b>Wavelengths Management Line Cards</b>		
	NCS2K-9-SMRxxFS	
	NCS2K-20-SMR-FS	
	NCS2K-12-AD-CCOFS	R10.5
	NCS2K-16-AD-CCOFS	
	NCS2K-16-WXC-FS	
	15454-80-WXC-C	
	15216-MD-40-ODD/EVEN/ID-50	R10.5.2
	15216-EF-40-ODD/EVEN	

**Table B-2** Cards Supported by NCS 2015

Interface Type	Card	Release
<b>Optical Amplifier Line Cards</b>		
	NCS2K-EDRA1-26/35C	R10.5
	NCS2K-EDRA2-26/35C	
	15454-OPT-EDFA-17/24	
	15454-M-RAMAN-CTP	
	15454-M-RAMAN-COP=	
	15454-OPT-PRE	
	15454-OPT-BST	
	15454-OPT-BST-E	
	15454-OPT-AMP-C	
<b>Transponder/Muxponder Ancillary Cards</b>	15454-OPT-AMP-17C	R10.5.2
	NCS2K-200G-CK-C	
	NCS2K-100GS-CK-C	
	NCS2K-MR-MXP-LIC	
	NCS2K-100G-CK-C	
	NCS2K-100ME-CKC	
	15454-M-100G-LC	R10.5
	15454-M-100-ME-LC	
	15454-M-10X10G-LC	
	15454-M-WSE-K9=	
	15454-AR-MXP	
	15454-AR-XPE	
	15454-CFP-LC	
	15454-AR-XP=	R10.5.2
	15454-OTU2-XP=	
	15454-40E-MXP-C=	
	15454-40E-TXP-C=	
	15454-10E-L1-C	
	15454-PSM	
	15454-OSC-CSM	