

M SERIES AND T SERIES PIC/FPC COMPATIBILITY MATRIX

Flexible PIC Concentrators (FPCs) house the Physical Interface Cards (PICs) and are installed in front-side slots in the Juniper Networks® M40e, M120, M320, T320 Multiservice Edge Routers and the Juniper Networks T640 and T1600 Core Routers. The Juniper Networks M7i and M10i Multiservice Edge Routers have built-in FPCs. The ability to mix and match PICs within a single FPC slot offers unparalleled interface density and flexibility,

making cost-effective use of valuable rack space while enabling service providers to efficiently scale the network.

For investment protection and smooth migration, many PICs are portable between M40e, M120, M320, T320, T640 and T1600 routers. M7i and M10i PICs are also interchangeable.

PIC TYPE	M7i	M10i	M40E		M120			M320			T320			T640/T1600			
	BUILT-IN	BUILT-IN	FPC 1	FPC 2	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 4
SONET/SDN PICs																	
OC-3c/STM-1, 2-port	•	•															
OC-3c/STM-1, 4-port	•	•	•	•	•	•		•	•		•	•		•	•		
OC-12c/STM-4, 1-port	•	•	•		•			•			•			•			
OC-12c/STM-4, 4-port				•		•			•		•				•		
OC-48c/STM-16, 1-port SFP		•		•		•			•		•				•		
OC-48c/STM-16, 4-port SFP								•		•			•			•	
OC-192c/STM-64, 1-port								•		•			•			•	
OC-192c/STM-64, 1-port XFP								•		•			•			•	
OC-192c/STM-64, 4-port XFP																	•
OC-768c/STM-256, 1-port																	•
Multi-Rate SONET/SDH PICs																	
OC-3/STM-1, 2-port SFP	•	•															
OC-12/STM-4 or OC-3/STM-1, 1-port SFP	•	•	•		•			•			•			•			
OC-12/STM-4, 1-port or OC-3/STM-1, 4-port, SFP	•	•	•		•	•		•	•		•	•		•	•		
OC-48/STM-16 or OC-12/STM-4 or OC-3/STM-1, 1-port SFP			•			•			•		•				•		
Ethernet PICs																	
Fast Ethernet, 4-port TX	•	•	•		•			•			•			•			
Fast Ethernet, 8-port FX	•	•	•		•			•			•						
Fast Ethernet, 12-port TX	•	•	•		•			•			•						
Fast Ethernet, 48-port TX				•		•			•			•					
1-Gigabit Ethernet, 1-port SFP	•	•	•		•			•			•			•			
1-Gigabit Ethernet, 2-port SFP				•		•			•		•			•		•	
1-Gigabit Ethernet, 4-port SFP				•		•			•		•			•		•	
1-Gigabit Ethernet, 10-port SFP								•		•			•			•	•
10-Gigabit Ethernet, 1-port XENPAK								•		•			•			•	•
10-Gigabit Ethernet, 1-port DWDM								•		•			•			•	•
10-Gigabit Ethernet, 4-port XFP																	•

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	BUILT-IN	BUILT-IN	FPC 1	FPC 2	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 4
Ethernet IQ PICs																	
1-Gigabit Ethernet IQ, 1-port SFP	•	•	•		•			•			•					•	
1-Gigabit Ethernet IQ, 2-port SFP				•		•			•			•				•	
Ethernet IQ2 PICs																	
1-Gigabit Ethernet IQ2, 4-port SFP oversubscription	•	•	•		•			•			•					•	
1-Gigabit Ethernet IQ2, 8-port SFP oversubscription				•		•			•							•	
1-Gigabit Ethernet IQ2, 8-port SFP line rate								•		•			•				•
10-Gigabit Ethernet IQ2, 1-port XFP line rate								•		•			•				•
ATM2 IQ PICs																	
E3 IQ, 2-port	•	•															
DS3 IQ, 4-port	•	•	•		•			•			•					•	
E3 IQ, 4-port			•		•			•			•					•	
OC-3/STM-1 IQ, 2-port	•	•	•		•			•			•					•	
OC-12/STM-4 IQ, 1-port	•	•	•		•			•			•					•	
OC-12/STM-4 IQ, 2-port				•		•			•			•				•	
OC-48/STM-16 IQ, 1-port				•		•			•			•				•	
Channelized IQ PICs																	
ChE1, IQ, 10-port	•	•	•		•			•									
ChT1, IQ, 10-port	•	•	•		•			•									
ChDS3 IQ, 4-port	•	•	•		•			•			•					•	
ChOC3 IQ, 1-port	•	•	•		•			•			•					•	
ChSTM-1 IQ, 1-port	•	•	•		•			•			•					•	
ChOC-12 IQ, 1-port	•	•	•		•			•			•					•	
Non-Channelized PDH PICs																	
T1, 4-port	•	•	•		•			•									
E1, 4-port	•	•	•		•			•									
DS3, 2-port	•	•															
DS3, 4-port			•		•			•			•					•	
E3, 2-port	•	•															
E3 IQ, 4-port			•		•			•			•					•	

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	BUILT-IN	BUILT-IN	FPC 1	FPC 2	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 1	FPC 2	FPC 3	FPC 4
Serial PICs																	
EIA-530, 2-port	•	•	•		•												
Services PICs																	
Encryption Services (ES)	•	•	•		•			•			•					•	
Monitoring Services II								•			•					•	
Monitoring Services III									•			•				•	
Multi Services 100	•	•	•		•			•			•					•	
Multi Services 400							•		•			•				•	
Multi Services 500				•			•			•			•				•
Link Services PIC, 4 ML bundles	•	•	•					•									
Link Services PIC, 32 ML bundles	•	•	•					•									
Link Services PIC, 128 ML bundles	•	•	•					•									
Tunnel PIC type 1	•	•	•		•			•			•					•	
Tunnel PIC type 2				•		•			•			•				•	
Tunnel PIC type 3								•			•			•			•
Tunnel PIC type 4																	•

For more information, and details about PIC support on specific FPC hardware revision, please consult the PIC guide of the related platform:

- M Series routers: <http://www.juniper.net/techpubs/hardware/m-series.html>
- T Series routers: <http://www.juniper.net/techpubs/hardware/t-series.html>

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