

Microsemi Step Down Switchers

ALTERA FPGAs	Output Voltage	Input Voltage	Output Current						
			≤1A	≤2A	≤3A	≤5A	≤7A	>10A	>20A
Stratix® V	0.85V	2.8V to 5.5V	NX4108 NX4110 LX7172 LX7186A(2.5V) LX7188 LX8240 (LDO, 4.2V max) NX2124/A*	LX7104(4.5V) LX7172(1.2A/2.5V) LX7167A(3V) NX2124/A*	LX7167A(2.4A/3V) LX7169(3V) LX7175(3V) LX7176(3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) LX7165-01(3V) LX7178(3V) LX7175(3.5A/3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) NX2124/A*	NX2124/A*	NX2124/A*
		4.5V to 18V	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) LX7104 NX2124/A* NX2838(8V)	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) NX9548 NX2124/A* NX2838(8V)	NX9548* LX9610* (8V, 12A) LX1752 LX1675 NX2139* NX2147* NX2155H*(8V) NX2838(8V)	LX9610* (8V, 12A) LX1675 NX2124/A* NX2139* NX2147* NX2155H*(8V)	NX2124/A* NX2155H(8V) NX2423 LX7302(5V)
		2V to 24V				NX2838*	NX2838* LX1675	LX1675 NX2124/A*	NX2124/A* LX7302(5V)
Stratix® IV Arria® II	0.9V	2.8V to 5.5V	NX4108 NX4110 LX7172 LX7186A(2.5V) LX7188 LX8240 (LDO, 4.2V max) NX2124/A*	LX7104(4.5V) LX7172(1.2A/2.5V) LX7167A(3V) NX2124/A*	LX7167A(2.4A/3V) LX7169(3V) LX7175(3V) LX7176(3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) LX7165-01(3V) LX7178(3V) LX7175(3.5A/3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) NX2124/A*	NX2124/A*	NX2124/A*
		4.5V to 18V	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) LX7104 NX2124/A* NX2838(8V)	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) NX9548 NX2124/A* NX2838(8V)	NX9548* LX9610* (8V, 12A) LX1752 LX1675 NX2139* NX2147* NX2155H*(8V) NX2838(8V)	LX9610* (8V, 12A) LX1675 NX2124/A* NX2139* NX2147* NX2155H*(8V)	NX2124/A* NX2155H(8V) NX2423 LX7302(5V)
		2V to 24V				NX2838*	NX2838* LX1675	LX1675 NX2124/A*	NX2124/A* LX7302(5V)

NOTE: Regulators, Controllers, Power Module, (x.xV) = Minimum input voltage x.xV, *Maximum input voltage can be higher than the boundary listed

Microsemi Step Down Switchers (continued)

ALTERA FPGAs	Output Voltage	Input Voltage	Output Current						
			≤1A	≤2A	≤3A	≤5A	≤7A	>10A	>20A
Stratix® IV	0.95V	2.8V to 5.5V	NX4108 NX4110 LX7172 LX7186A(2.5V) LX7188 LX8240 (LDO,4.2V max) NX2124/A*	LX7104(4.5V) LX7172(1.2A/2.5V) LX7167A(3V) NX2124/A*	LX7167A(2.4A/3V) LX7169(3V) LX7175(3V) LX7176(3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) LX7165-01(3V) LX7178(3V) LX7175(3.5A/3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) NX2124/A*	NX2124/A*	NX2124/A*
		4.5V to 18V	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) LX7104 NX2124/A* NX2838(8V)	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) NX9548 NX2124/A* NX2838(8V)	NX9548* LX9610* (8V,12A) LX1752 LX1675 NX2139* NX2147* NX2155H* (8V) NX2838(8V)	LX9610* (8V,12A) LX1675 NX2124/A* NX2139* NX2147* NX2155H*(8V)	NX2124/A* NX2155H(8V) NX2423 LX7302(5V)
		2V to 24V				NX2838*	NX2838* LX1675	LX1675 NX2124/A*	NX2124/A* LX7302(5V)
Cyclone® IV	1.0V	2.8V to 5.5V	NX4108 NX4110 LX7172 LX7186A(2.5V) LX7188 LX8240 (LDO,4.2V max) NX2124/A*	LX7104(4.5V) LX7172(1.2A/2.5V) LX7167A(3V) NX2124/A*	LX7167A(2.4A/3V) LX7169(3V) LX7175(3V) LX7176(3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) LX7165-01(3V) LX7178(3V) LX7175(3.5A/3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) NX2124/A*	NX2124/A*	NX2124/A*
		4.5V to 18V	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) LX7104 NX2124/A* NX2838(8V)	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) NX9548 NX2124/A* NX2838(8V)	NX9548* LX9610* (8V,12A) LX1752 LX1675 NX2139* NX2147* NX2155H* (8V) NX2838(8V)	LX9610* (8V,12A) LX1675 NX2124/A* NX2139* NX2147* NX2155H*(8V)	NX2124/A* NX2155H(8V) NX2423 LX7302(5V)
		2V to 24V				NX2838*	NX2838* LX1675	LX1675 NX2124/A*	NX2124/A* LX7302(5V)

NOTE: Regulators, Controllers, Power Module, (x.xV) = Minimum input voltage x.xV, *Maximum input voltage can be higher than the boundary listed

Microsemi Step Down Switchers (continued)

ALTERA FPGAs	Output Voltage	Input Voltage	Output Current						
			≤1A	≤2A	≤3A	≤5A	≤7A	>10A	>20A
Stratix® III Arria® V Cyclone® V	1.1V	2.8V to 5.5V	NX4108 NX4110 LX7172 LX7186A(2.5V) LX7188 LX8240 (LDO, 4.2V max) NX2124/A*	LX7104(4.5V) LX7172(1.2A/2.5V) LX7167A(3V) NX2124/A*	LX7167A(2.4A/3V) LX7169(3V) LX7175(3V) LX7176(3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) LX7165-01(3V) LX7178(3V) LX7175(3.5A/3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) NX2124/A*	NX2124/A*	NX2124/A*
		4.5V to 18V	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) LX7104 NX2124/A* NX2838(8V)	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) NX9548 NX2124/A* NX2838(8V)	NX9548* LX9610* (8V, 12A) LX1752 LX1675 NX2139* NX2147* NX2155H* (8V) NX2838(8V)	LX9610* (8V, 12A) LX1675 NX2124/A* NX2139* NX2147* NX2155H*(8V)	NX2124/A* NX2155H(8V) NX2423 LX7302(5V)
		2V to 24V				NX2838*	NX2838* LX1675	LX1675 NX2124/A*	NX2124/A* LX7302(5V)
Stratix® II Arria® Cyclone® IV/ III/II	1.2V	2.8V to 5.5V	NX4108-12 NX4110 LX7172 LX7186A(2.5V) LX7188 LX8240 (LDO, 4.2V max) NX2124/A*	LX7104(4.5V) LX7172(1.2A/2.5V) LX7167A(3V) NX2124/A*	LX7167A(2.4A/3V) LX7169(3V) LX7175(3V) LX7176(3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) LX7165-01(3V) LX7178(3V) LX7175(3.5A/3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) NX2124/A*	NX2124/A*	NX2124/A*
		4.5V to 18V	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) LX7104 NX2124/A* NX2838(8V)	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) NX9548 NX2124/A* NX2838(8V)	NX9548* LX9610* (8V, 12A) LX1752 LX1675 NX2139* NX2147* NX2155H* (8V) NX2838(8V)	LX9610* (8V, 12A) LX1675 NX2124/A* NX2139* NX2147* NX2155H*(8V)	NX2124/A* NX2155H(8V) NX2423 LX7302(5V)
		2V to 24V				NX2838*	NX2838* LX1675	LX1675 NX2124/A*	NX2124/A* LX7302(5V)

NOTE: Regulators, Controllers, Power Module, (x.xV) = Minimum input voltage x.xV, *Maximum input voltage can be higher than the boundary listed

Microsemi Step Down Switchers (continued)
**ALTERA
FPGAs**

Output Voltage	Input Voltage	Output Current						
		≤1A	≤2A	≤3A	≤5A	≤7A	>10A	>20A
1.5V Stratix® Cyclone®	2.8V to 5.5V	NX4108-15 NX4110 LX7172 LX7186A(2.5V) LX7188 LX8240 (LDO, 4.2V max) NX2124/A*	LX7104(4.5V) LX7172(1.2A/2.5V) LX7167A(3V) NX2124/A*	LX7167A(2.4A/3V) LX7169(3V) LX7175(3V) LX7176(3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) LX7165-01(3V) LX7178(3V) LX7175(3.5A/3V) LX7176A(4A/3V) LX7180A(4A/3V) NX2124/A*	NX9548(4.5V) NX2124/A*	NX2124/A*	NX2124/A*
	4.5V to 18V	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) LX7104 NX2124/A* NX2838(8V)	NX9415(8V) NX2124/A* NX2838(8V)	NX9415(8V) NX9548 NX2124/A* NX2838(8V)	NX9548* LX9610* (8V, 12A) LX1752 LX1675 NX2139* NX2147* NX2155H*(8V) NX2838(8V)	LX9610* (8V, 12A) LX1675 NX2124/A* NX2139* NX2147* NX2155H*(8V)	NX2124/A* NX2155H(8V) NX2423 LX7302(5V)
	2V to 24V					NX2838*	NX2838* LX1675	LX1675 NX2124/A*

NOTE: Regulators, Controllers, Power Module, (x.xV) = Minimum input voltage x.xV, *Maximum input voltage can be higher than the boundary listed