



Microsemi FPGAs and cSoCs		Microsemi Switching and Linear DC-DC Regulators							
CORE	IO	Output Voltage	Input Supply Rail	Output Current					
				<500 mA	≤1 A	≤2 A	≤3 A	≤5A	>5A
IGLOO-V2 ProASIC3L	IGLOO-V2 ProASIC3L	1.2V	2.8V to 5.5V	LX8213-12(L) LX8211-00(L)	NX4108-12 NX4108(2.8V) NX4110	LX7167(3V)	LX7169(3V)		
			5V to 18V			NX7101 LX7104(4.5V)	NX7102	NX9415(8V)	NX9548(4V) NX2155H(8V) LX9610(8V) LX1752(6V)
			12V to 22V			LX3005(6V)		NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)	NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)
IGLOO ProASIC3 SmartFusion Fusion Axcelerator	IGLOO ProASIC3 SmartFusion Fusion Axcelerator	1.5V	2.8V to 5.5V	LX8213-00(L) LX8211-00(L)	NX4108-15 NX4108 NX4110 LX7172(2.5V)	LX7167(3V)	LX7169(3V)		
			5V to 18V			NX7101 LX7108(4.5V) LX7104(4.5V)	NX7102	NX9415(8V)	NX9548(4V) NX2155H(8V) LX9610(8V) LX1752(6V)
			12 to 22V			LX3005(6V)		NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)	NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)
IGLOO ProASIC3 SmartFusion Fusion Axcelerator	IGLOO ProASIC3 SmartFusion Fusion Axcelerator	1.8V	2.8V to 5.5V	LX8213-00(L) LX8211-00(L)	NX4108-18 NX4108 NX4110 LX7172(2.5V)	LX7167(3V) LX7169(3V)	LX7169(3V)		
			5V to 18V			NX7101 LX7104(4.5V)	NX7102	NX9415(8V)	NX9548(4V) NX2155H(8V) LX9610(8V) LX1752(6V)
			12 to 22V			LX3005(6V)		NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)	NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)
SX-A eX	IGLOO ProASIC3 SmartFusion Fusion Axcelerator SX-A eX	2.5V	2.8V to 5.5V	LX8213-00(L) LX8211-25(L)	NX4108 NX4110 LX7172(2.5V)	LX7167(3V) LX7169(3V)	LX7169(3V)		
			5V to 18V			NX7101 LX710(4.5V)	NX7102	NX9415(8V)	NX9548(4V) NX2155H(8V) LX9610(8V) LX1752(6V)
			12 to 22V			LX3005(6V)		NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)	NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)
MX	IGLOO ProASIC3 SmartFusion Fusion Axcelerator SX-A eX MX	3.3V	4V to 5.5V	LX8213-33(L) LX8211-33(L)	NX4108-33 NX4108 NX4110 LX7172	LX7167 LX7169	LX7169(3V)		
			5V to 18V			NX7101 LX7104(4.5V)	NX7102	NX9415(8V)	NX9548(4V) NX2155H(8V) LX9610(8V) LX1752(6V)
			12 to 22V			LX3005(6V)		NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)	NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)
SX-A eX MX	SX-A eX MX	5V	5V to 18V			NX7101 LX7104(4.5V)		NX9415(8V)	NX9548(4V) NX2155H(8V) LX9610(8V) LX1752(6V)
			12 to 22V			NX7101		NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)	NX9548(4V) NX2155H(8V) LX1675 NX2838*(8V)

NOTE: (L) = Linear, (x.xV) = Minimum input voltage x.xV, NX2838 is rated for 30V<sub>in</sub>

ALTERA FPGAs	Microsemi Step Down Switchers							
	Output Voltage	Input Voltage	Output Current					
			≤1A	≤2A	≤3A	≤7A	>10A	>20A
Stratix® V	0.85V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
Stratix® IV Arria® II	0.9V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
Stratix® IV	0.95V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
Cyclone® IV	1.0V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*

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	Microsemi Step Down Switchers (continued)							
	Output Voltage	Input Voltage	Output Current					
			≤1A	≤2A	≤3A	≤7A	>10A	
Stratix® III Arria® V Cyclone® V	1.1V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
Stratix® II Arria® Cyclone® IV/III/II	1.2V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
Stratix® Cyclone®	1.5V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*

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

XILINX FPGAs	Microsemi Step Down Switchers							
	Output Voltage	Input Voltage	Output Current					
			≤1A	≤2A	≤3A	≤7A	>10A	>20A
Virtex <sup>®</sup> -7/6 Kintex <sup>™</sup> -7 Artix <sup>™</sup> -7	0.9V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
Virtex <sup>®</sup> -7/6/5 Kintex <sup>™</sup> -7 Artix <sup>™</sup> -7 Spartan <sup>®</sup> -6	1.0V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
Spartan <sup>®</sup> -6/3	1.2V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*
CoolRunner <sup>™</sup> -II	1.8V	2.8V to 5.5V	NX4108 NX4110	LX7172 LX1918 LX7167(3.0V)	LX7169(3.0V)			
		4.5V to 18V		LX7104 LX7101(4.75V)	NX7102(4.75V)	NX9415*(8V) NX9548*	LX9610*(8V) NX2423* NX2138* NX2147* NX2155H*(8V)	LX1752* NX2837*(9V)
		2V to 24V		LX3005*(4.75V)			NX2124/A*	LX1675 NX2139A NX2838*

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