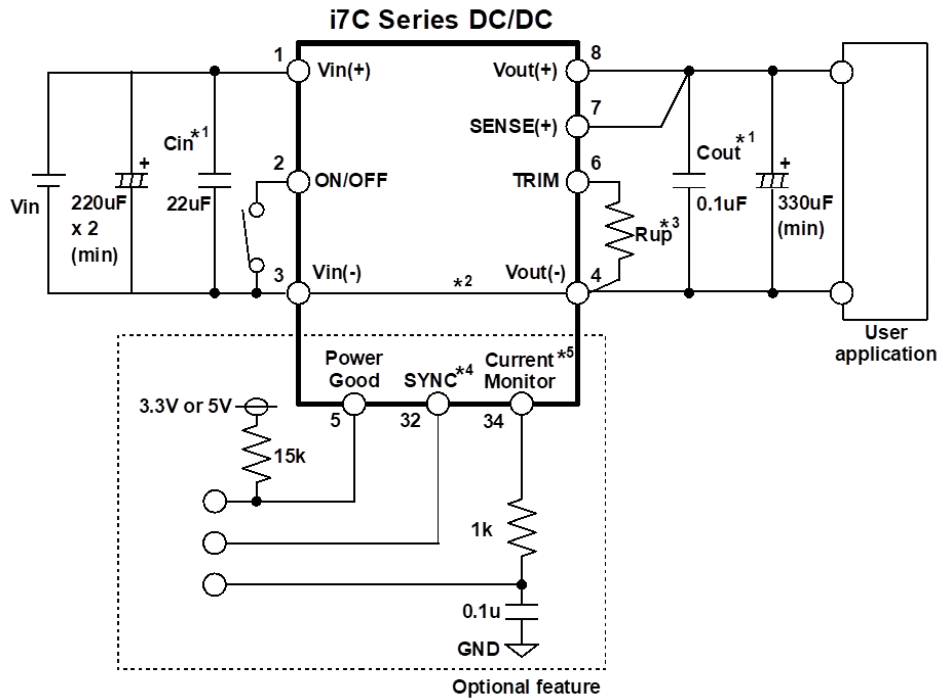


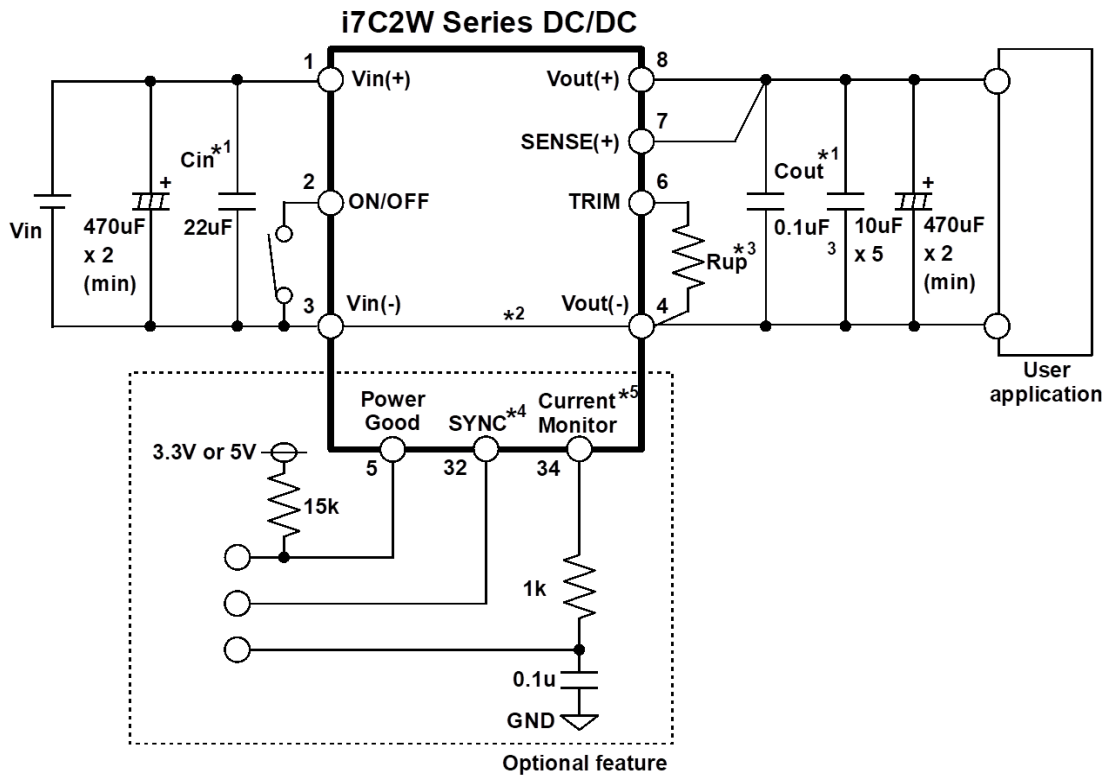
Specification					
Model		i7C4W012A050V		i7C4W008A120V	i7C2W020A120V
Input					
Input Voltage range	Vdc	9 - 53 (Turn on at 9.5V typ)		9 - 36 (Turn on at 9.5V typ)	
Input Current (max)	A	25		30	
Standby Input Current (typ)	mA	0.25 (Nominal input, ON/OFF = OFF)			
No Load Input Current, Vin = 24 V (typ)	mA	5.0 (Vo = 12 V)		5.0 (Vo = 24 V)	
Efficiency	%	91 - 96	93 - 97	94 - 97	
Safety Agency Certifications	-	IEC/UL/CSA/EN62368-1, 60950-1, CE Mark			
Output					
Output Voltage Tolerance	%	± 4			
Switching Frequency	kHz	250			
Line Regulation	%	0.8	0.8	0.8	
Load Regulation	%	0.8	0.5	0.8	
External Load Capacitance	uF	330 - 3000		1000 - 5000	
Ripple & Noise	mV	200	180	200	
Overcurrent Protection Threshold (typ)	A	17	15	26	
Overtemperature Protection	-	Yes			
Remote Sense	-	(+) Sense, compensating up to 5% of output voltage			
Remote On/Off	-	See Model Selector			
Power Good	-	Optional (Full Feature Version)			
Frequency Synchronization (Sync)	-	Optional (Full Feature Version)			
Current Monitor	-	Optional (Full Feature Version)			
Parallel Operation	-	Not possible			
Series Operation	-	Not possible			
Environmental					
Operating Temperature	°C	-40 to 125 (See i7C4W Specification ; i7C2W Specification for Derating)			
Storage Temperature	°C	-55 to 125			
Humidity (non condensing)	%RH	5 - 95 (Operating & Storage)			
Cooling	-	Convection, conduction (baseplate) or forced air		Convection or forced air	
Other					
Weight (Typ)	g	Open Frame: 25g, with Baseplate: 50g, with Heatsink: 70g		Open Frame: 28g	
Size (LxWxH)	mm	Open Frame: 34 x 36.8 x 12.2		34 x 36.8 x 14.7	
		With Baseplate: 34 x 36.8 x 13.0		-	
		With Heatsink: 34 x 36.8 x 24.9		-	
Size (LxWxH)	Inches	Open Frame: 1.34 x 1.45 x 0.5		1.34 x 1.45 x 0.58	
		With Baseplate: 1.34 x 1.45 x 0.51		-	
		With Heatsink: 1.34 x 1.45 x 0.98		-	
MTBF - Telcordia SR-332	-	> 10 Mhrs; 100% Load; Ta = 40 °C			
Warranty	yrs	3 years			

Notes
See website for detailed specifications and test methods.

Typical Application Circuit (i7C4W)



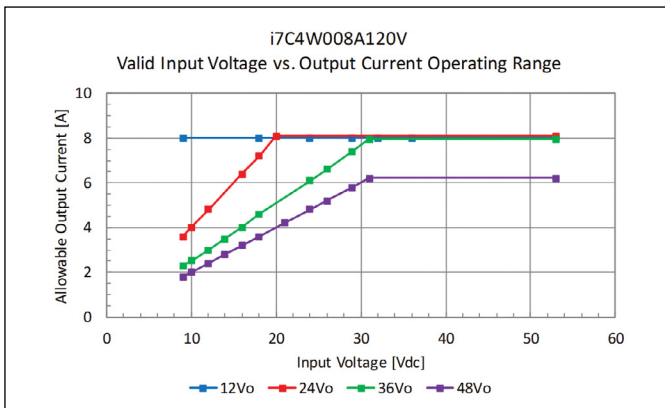
Typical Application Circuit (i7C2W)



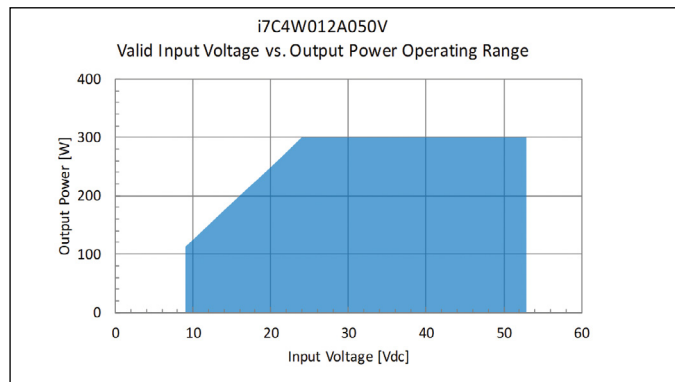
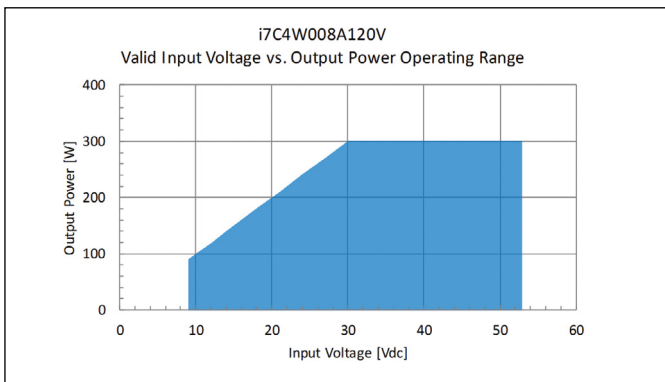
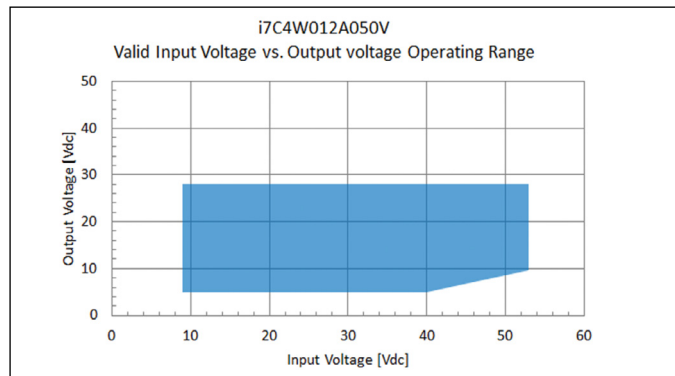
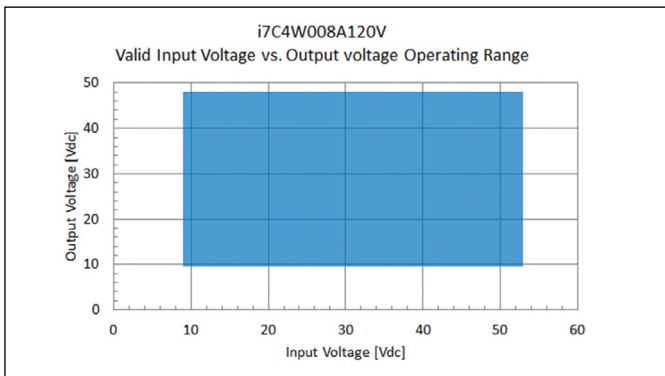
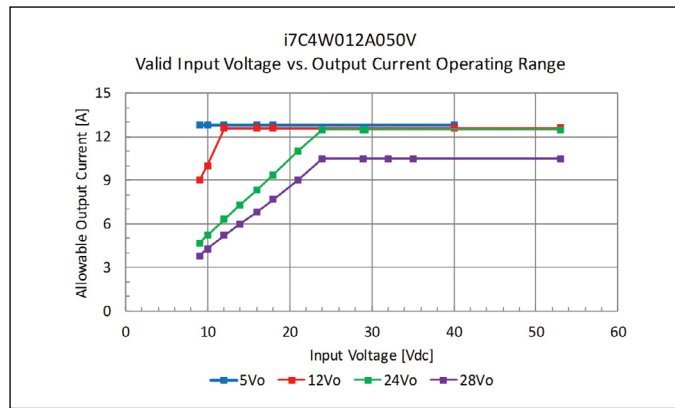
Recommendations:

1. Cin/Cout MLCC should be connected to the i7C module as close as possible in order to reject high frequency noise.
2. Connect Vin(-) and Vout(-) to copper ground plane underneath the i7C module.
3. TRIM resistor "Rup" should be connected to the i7C module as close as possible.
4. SYNC must be connected to GND when not in use.
5. External R-C filter is needed for Current Monitor, as shown, for Current Monitor.

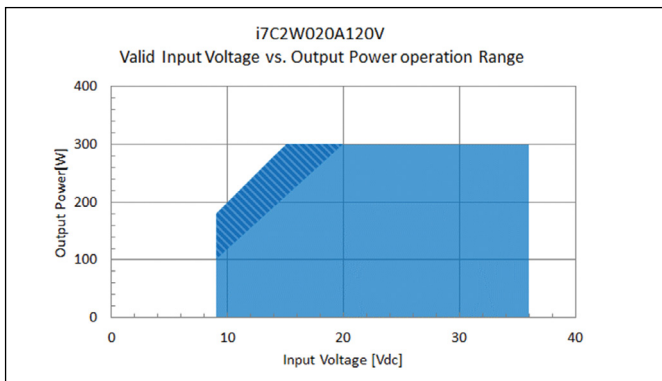
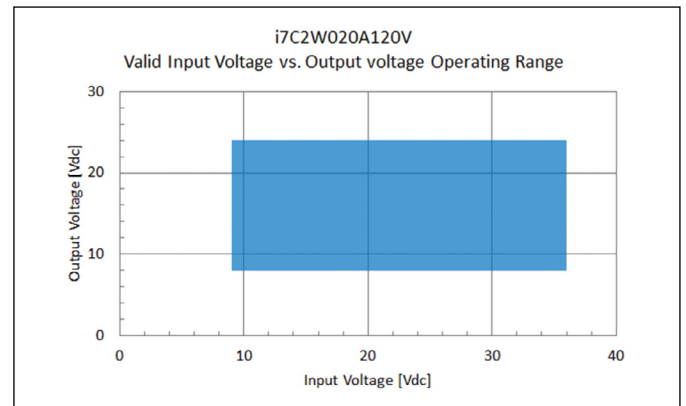
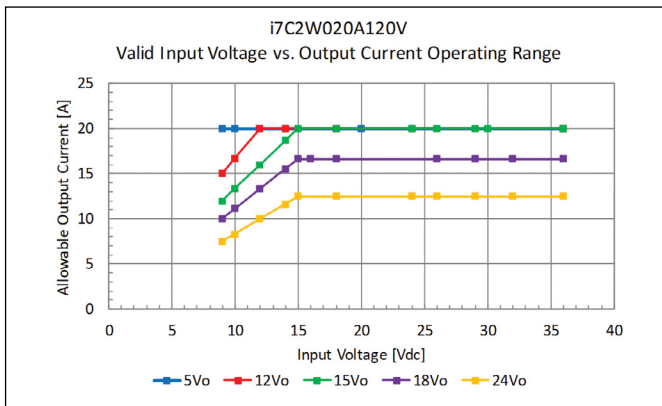
Operating Range i7C4W008A120V



Operating Range i7C4W012A050V



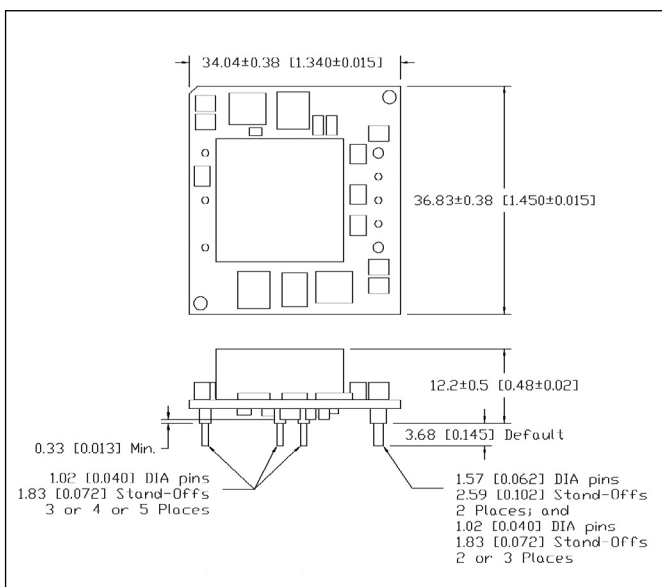
Operating Range i7C2W020A120V



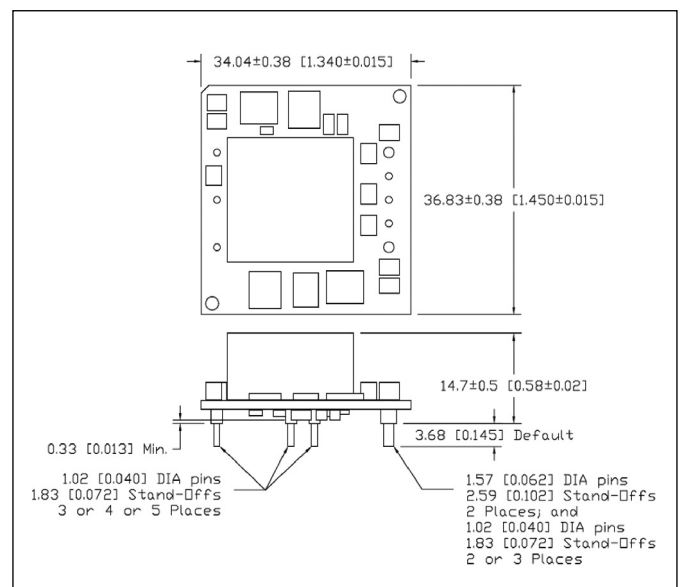
Wider output regulation tolerance (dark blue shaded region) expected during step-up/boost Operation when $V_{in} < 20V$, $P_{out} > 100W$.
See i7C2W Specifications for related load regulation charts.

Mechanical Specification

Openframe - 00x-R Series (i7C4W)

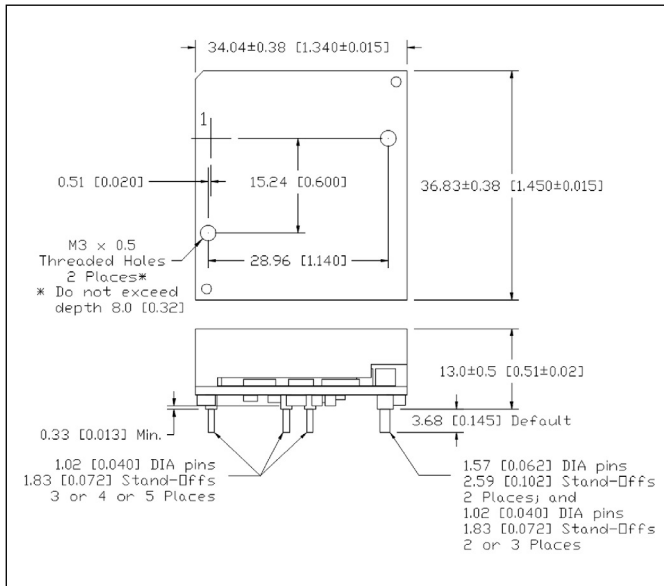


Openframe - 00x-R Series (i7C2W)

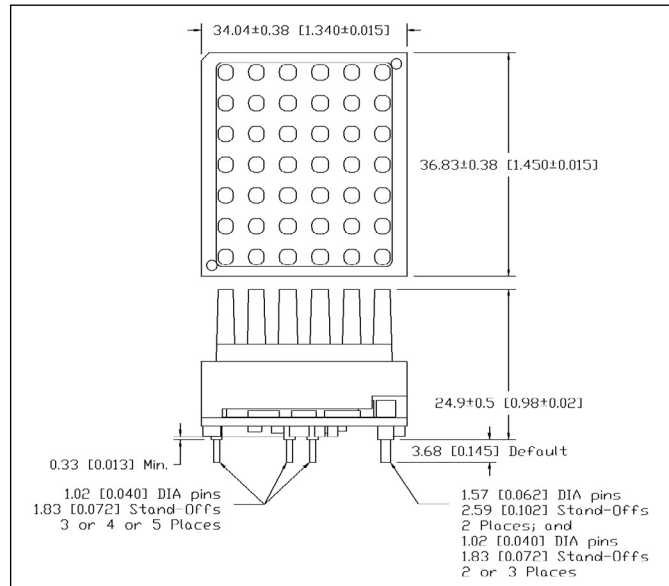


Mechanical Specification

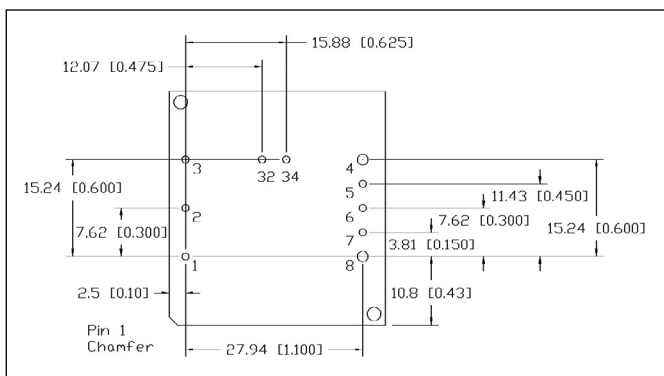
Baseplate - xCx-R Series (i7C4W)



Heatsink - xFx-R Series (i7C4W)



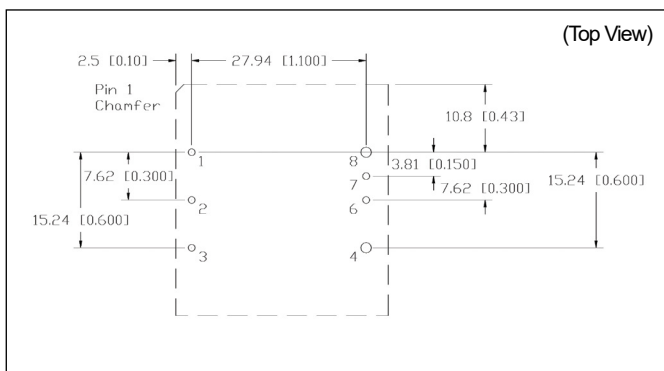
Mechanical Pin-Out / Spacing



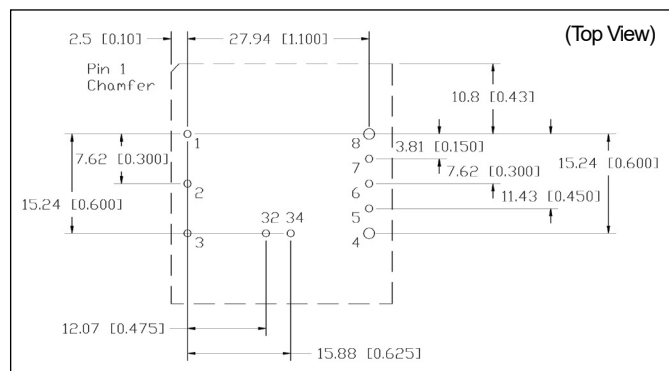
Pinout

PIN	Function	PIN	Function
1	VIN (+)	6	TRIM
2	ON / OFF	7	SENSE (+)
3	VIN (-) / GND	8	VOOUT (+)
4	VOOUT (-) / GND	32	Sync (Option)
5	PWR GOOD (Option)	34	Current Monitor (Option)

Recommended Hole Pattern – STANDARD – xx1-R



Recommended Hole Pattern – FULL FEATURE – xx2-R / -xx3-R





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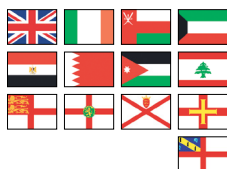
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