

# OPTION SHEET FOR NANOPOWER P60 DOCK

Customer Product ID: \_\_\_\_\_ (optional, enter your reference here)

Order number: \_\_\_\_\_

Example Use:

Option A	<input checked="" type="checkbox"/>	= Yes
Option B	<input type="checkbox"/>	= No

## 1. Configuration Table

CSP address: \_\_\_\_\_ (default is 4)

Stack Connector Options - See chapter 2						
	A	B	C	D	E	None
Connector soldered to PCB						
Connector stacked on top						

Battery voltage range - Select one	
12.0 – 16.8 V	
24 – 33.6 V	

Battery interface options – See chapter 3	
BP4 interface	Install BP4 interface

Module configuration – See chapter 4	
Function	Daughterboard
X1	
X2	
X3	
X4	

Circuit breaker bypass – See chapter 5	
	Mount
VBAT Circuit breaker bypass	

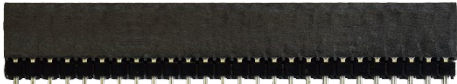
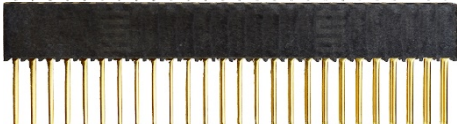
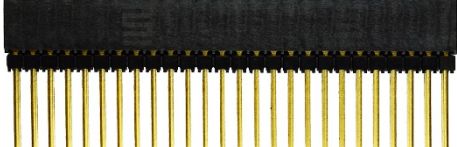
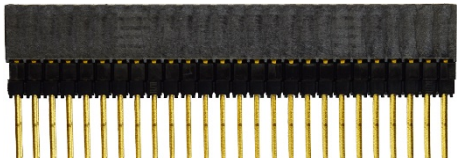

Misc. options	
Full conformal coating of PCB, cell interconnects etc. (extra cost)	
ISS upgrade (extra cost) NASA, JAXA and NanoRacks safety requirements for ISS launch. This does not include ISS unit acceptance testing.	

Stack connector H1 – See chapter 6		
	Name/function	Mark
H1-1	CANL	
H1-3	CANH	
H1-4	X3 output ch. 2	
H1-5	X3 output ch. 0	
H1-6	X3 output ch. 1	
H1-7	GND	
H1-8	GND	
H1-10	X1 output ch. 0	
H1-12	X1 output ch. 3	
H1-14	X1 output ch. 6	
H1-33	GND	
H1-34	GND	
H1-35	X4 output ch. 2	
H1-36	X4 output ch. 5	
H1-37	X4 output ch. 1	
H1-38	X4 output ch. 4	
H1-39	X4 output ch. 0	
H1-40	X4 output ch. 3	
H1-41	I <sup>2</sup> C Data (2k4 pull-up)	
H1-43	I <sup>2</sup> C Clock (2k4 pull-up)	
H1-45	GND	
H1-46	GND	
H1-47	X2 output ch. 0	
H1-48	X2 output ch. 1	
H1-49	X2 output ch. 3	
H1-50	X2 output ch. 4	
H1-51	X2 output ch. 6	
H1-52	X2 output ch. 7	

Stack connector H2 – See chapter 6		
	Name/function	Mark
H2-1	X3 Output ch. 5	
H2-2	X3 Output ch. 8	
H2-3	X3 Output ch. 4	
H2-4	X3 Output ch. 7	
H2-5	X3 Output ch. 3	
H2-6	X3 Output ch. 6	
H2-7	GND	
H2-8	GND	
H2-9	X1 Output ch. 1	
H2-10	X1 Output ch. 2	
H2-11	X1 Output ch. 4	
H2-12	X1 Output ch. 5	
H2-13	X1 Output ch. 7	
H2-14	X1 Output ch. 8	
H2-16	GND	
H2-25	Output 5 V	
H2-26	Output 5 V	
H2-27	Output 3.3 V	
H2-28	Output 3.3 V	
H2-29	GND	
H2-30	GND	
H2-31	GND	
H2-32	GND	
H2-35	X4 output ch. 8	
H2-37	X4 output ch. 7	
H2-39	X4 output ch. 6	
H2-45	Output V_BAT	
H2-46	Output V_BAT	
H2-47	X2 Output ch. 2	
H2-48	GND	
H2-49	X2 Output ch. 5	
H2-51	X2 Output ch. 8	
H2-52	GND	

## 2. Stack Connectors

The following types of Samtec connectors are the available types for this product. If another connector is needed, please contact GomSpace to get a quote for mounting another type.

A		ESQ-126-12-S-D
B		SSQ-126-03-G-D
C		ESQ-126-14-G-D
D		ESQ-126-24-G-D
E		SSQ-126-01-F-D

## 3. Battery Interface

The P60 always has the BPX connector interface installed. Only install e.g. BP4 interface if the P60 is used together with a BP4 battery pack. Note that the BP4 connector limits slightly the accessibility to the X4 module TFM connector.

## 4. Module Configuration

It is recommended to order your ACU-200, PDU-200 and A3200 at the same time as the Dock to allow for GomSpace to assemble and test the fully mounted system.

When possible use X1 for ACU and X2 for PDU. A NanoMind A3200 can only be mounted in the X3 position.

## 5. Circuit Breaker Bypass

The VBAT circuit breaker bypass option allows the installation of two high current 0R jumpers to be installed, to permanently bypass the circuit breaker option, used when no circuit breaker switch is used.

## 6. Stack Connector Pin Connection

Each of the stack connector pins can be connected/disconnected to the P60 system.

If a custom choice is made, all default marks will be forfeit. In that case one must fill all used options.

## 7. Disclaimer

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