

OPTION SHEET FOR NANODOCK ADCS-6

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

Stack Connector Options See chapter 2					
	A	B	C	D	E
Connector					

GPS Options See chapter 3	
PPS on stack connector	

FTDI options See chapter 4	
Enable A3200 FTDI	


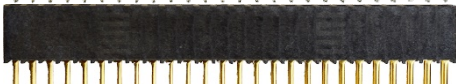


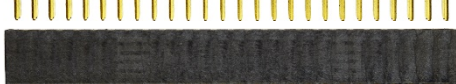
Payload Communications See chapter 5		
	UART	CAN
Communications on Payload 2		

Power Supply Options See chapter 6						
	VCC_OBC	VCC_RW	VCC_GYRO	VCC_PAY1-1	VCC_PAY1-2	VCC_PAY 2
H2-47 (PDU X2)						
H1-4 (PDU X3)						
H1-35 (PDU X4)						
H1-49 (PDU X2)						
H2-5 (PDU X3)						
H1-40 (PDU X4)						
H1-50 (PDU X2)						
H2-3 (PDU X3)						
H1-38 (PDU X4)						
H1-48 (PDU X2)						
H1-6 (PDU X3)						
H1-37 (PDU X4)						
H1-47 (PDU X2)						
H1-5 (PDU X3)						
H1-39 (PDU X4)						
H2-49 (PDU X2)						
H2-1 (PDU X3)						
H1-36 (PDU X4)						
Short PAYLOAD 1-1 PAYLOAD 1-2						
P4/P21						

Additional GND pins See chapter 6						
Pin	H1-8	H1-45	H1-46	H2-7	H2-8	H2-48
Add GND						

2. Stack Connector

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.

		Samtec Part Number	Height of Housing [mm]
A		ESQ-126-12-S-D	11.05
B		SSQ-126-03-G-D	8.51
C		ESQ-126-14-G-D	11.05
D		ESQ-126-24-G-D	13.59
E		SSQ-126-01-F-D	8.51

3. GPS

The NanoDock ADCS-6 is prepared for installation of a GPS module. The OBC (NanoMind A3200) is communicating with the GPS module.

Communication to the GPS module is also possible through connector P13.

The GPS module is powered via the VCC_OBC and can be switched on/off via the OBC (NanoMind A3200).

PPS is the Pulse Per Second signal from the GPS receiver. The PPS can be accessible on the stack connector pin H1-2.

4. FTDI Options

An FTDI chip is mounted to provide a USB to four serial ports (UART).

UART 4 on the NanoMind A3200 can be connected to the FTDI directly. If this option is chosen it is not possible to use the UART on P15.

5. Payload Communication

P8 is a payload connector with VCC, GND, I²C bus and either CAN or UART.

Please select if CAN or UART is used.

6. Power Supply Option

The daughter boards are powered from either the stack connector or from a distributed source via P4/P21. If powering from the stack connector it is possible to select the power source individually.

Please select one power source for each daughter board.

Furthermore, it is possible to add additional pins to GND.

On the PAYLOAD 1 connector it is possible to short the two voltage sources when a larger power consumption is needed.

The supply named 'VCC_OBC' is power supply for the NanoMind A3200, GPS receiver, and the GSSB supply. However, it is possible to switch on/off these via the A3200.

The four supplies for the reaction wheels are switchable from the NanoMind A3200.

View the table below for the voltage need of the mounted daughterboards.

GomSpace Daughterboard	Used Voltage
NanoMind A3200 and GPS	3.3 V
NanoTorque GSW-600	5.0 V

For further details view appropriate datasheet.

7. Disclaimer

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