Table 1 - **Document and Product Information**	
Document Name	CAVU-CDH-FS-OS-v2024.2
Document Description	CDH-FS Option Sheet
Product Name	CDH-FS
Product Description	Satellite Command & Data Handling Full Redundant Subsystem

Table 2 - **Customer Information**				
Company Name				
Contact Name				
Email Address				
Phone Number				
Address				
Mission Launch Window	From	4/19/24	To	4/24/24

Table 3 - **CDH-FS Model Requirements**		
Model Name		**Quantity**
Engineering Model	✔	2
Qualification Model	✔	2
Flight Model	✔	2

Table 4 - **CDH-FS Digital Inputs Configuration 1 to 90**		
You can choose Input Voltage Level and Pull Up/Down Resistor for Each Group. Default Configuration is 5V No Pull Up/Down.		
Port Number	**Voltage Level**	**Pull-Up/Pull-Down/None**
1~8	5V	NONE
9~16	5V	NONE
17~24	5V	NONE
25~32	5V	NONE
33~40	5V	NONE
41~48	5V	NONE
49~56	5V	NONE
57~64	5V	NONE
65~72	5V	NONE
73~80	5V	NONE
81~86	5V	NONE
87~90	5V	NONE

Table 5 - **CDH-FS Digital Outputs Configuration 1 to 100**		
You can choose Output Voltage Level and Pull Up/Down Resistor for Each Group. Default Configuration is 5V No Pull Up/Down.		
Port Number	**Voltage Level**	**Pull-Up/Pull-Down/None**
1~8	5V	NONE
9~16	5V	NONE
17~24	5V	NONE
25~32	5V	NONE
33~40	5V	NONE
41~48	5V	NONE
49~56	5V	NONE
57~64	5V	NONE
65~72	5V	NONE
73~80	5V	NONE
81~88	5V	NONE
89~92	5V	NONE
93~100	5V	NONE

Table 6 - **CDH-FS Analog to Digital Converter Configuration (ADC)**					
When Choosing “Double” that means double redundant and the default topology is multiplexed. Default Configuration is 128CH Double Multiplexed ±10V Pull-Down					
Multiplexed (For more than 32CH) ◉			**Dedicated Connections** ○		
16CH Single ○	**16CH Double** ○		**32CH Single** ○	**32CH Double** ○	
64CH Single ○	**64CH Double** ○		**96CH Single** ○	**96CH Double** ○	
128CH Single ○	**128CH Double** ◉		**144CH Single** ○	**144CH Double** ○	
Input Channel	**Voltage Input Range**	**Pull-Up/Pull-Down/None**			
1~16	±10V	NONE			
17~32	±10V	NONE			
33~48	±10V	NONE			
49~64	±10V	NONE			
65~80	±10V	NONE			
81~96	±10V	NONE			
97~112	±10V	NONE			
113~128	±10V	NONE			
129~144					
145~160					

Table 7 - **CDH-FS Digital to Analog Converter Configuration (DAC)**			
By default, the CDH-FS is equipped with 2CH ladder DAC, if you need more output channels, please select the required number, and configure them.			
1CH ○	**2CH** ◉	**3CH** ○	**4CH** ○
5CH ○	**6CH** ○	**7CH** ○	**8CH** ○

Output Channel	**Voltage Output Range**	**Voltage Buffer**
1 8bits	0~5V	Un-Buffered
2 8bits	0~5V	Un-Buffered
3		
4		
5		
6		
7		
8		

Table 8 - **CDH-FS Serial Ports Configuration**	
The Default Physical Layer for Serial Ports 1~8 is RS485 and for 9~16 is RS422 and there are one RS232 PHY and one UART TTL3.3, pls keep same PHY layers together.	
Serial Port Number	**Physical Layer**
1 ☑	RS422
2 ☑	RS422
3 ☑	RS422
4 ☑	RS422
5 ☑	RS422
6 ☑	RS422
7 ☑	RS422
8 ☑	RS422
9 ☑	RS485
10 ☑	RS485
11 ☑	RS485
12 ☑	RS485
13 ☑	RS485
14 ☑	RS485
15 ☑	RS485
16 ☑	RS485
17 ☑	RS232
18 ☐	

Table 9 - **CDH-FS CAN Configuration**			
The CDH-FS features 5 CAN 2.0 buses. While all are usable, 2 handle internal communication. We recommend 3 for satellite connection. Need more CAN buses, Contact us.			
1 ○	**2** ○	**3** ○	**4** ○
5 ◉	**6** ○	**7** ○	**8** ○
Bus	**Termination**		
CAN1	120Ω		
CAN2	120Ω		
CAN3	120Ω		
CAN4	120Ω		
CAN5	120Ω		
CAN6			
CAN7			
CAN8			

Table 10 - **CDH-FS NAND Flash Storage Configuration**			
The CDH-FS comes with Triple 8Gb SLC NAND Flash Chips by Default. We suggest upgrades up to 3x128Gb SLC. Capacities exceeding this limit might require adjustments to design, cost, and lead time.			
3x8Gb SLC ◉	**3x16Gb SLC** ○	**3x32Gb SLC** ○	**3x64Gb SLC** ○
3x128Gb SLC ○	**3x256Gb MLC** ○	**3x512Gb MLC** ○	**3x1.5Gb MCP** ○
3x6Gb MCP ○	**3x8Gb MCP** ○	**3x1024Gb UFS4.0** ○	**3x2048Gb UFS4.0** ○

Table 11 - **CDH-FS MRAM RAM Configuration**	
The CDH-FS comes with Default 160Mbits Magneto Resistive RAM in 40bits Wide Data Bus.	
160Mbits ◉	**320Mbits** ○

Table 12 - **CDH-FS MRAM ROM Configuration**	
The CDH-FS comes with Default Triple 32Mbits (Total 96Mbits) Magneto Resistive ROM for Code/Data Storage.	
3x32Mbits (96Mbits) ◉	**3x64Mbits (192Mbits)** ○

Table 13 - **CDH-FS Case Coating**			
The CDH-FS Structure is Made of AL 7075-T6 with Default Yellow Alodine Coating which is Conductive			
Hardcoat Black Anodize ○	**Yellow Alodine** ◉	**White Alodine** ○	**ENP** ○

Table 14 - **CDH-FS Digital PWM/Pulse Output Configuration**				
By default, the CDH-FS is Equipped with 10 Pulse/PWM Outputs				
1CH ○	**2CH** ○	**3CH** ○	**4CH** ○	**5CH** ○
6CH ○	**7CH** ○	**8CH** ○	**9CH** ○	**10CH** ◉

Output Channel	Output Type	Voltage Level
1	PWM	5V
2	PWM	
3	PWM	
4	PWM	
5	PWM	
6	PWM	
7	PWM	
8	PWM	
9	PWM	
10	PWM	

Table 15 - **CDH-FS Voltage Input Configuration**	
The CDH-FS Default Input voltage Configuration is 5V ±5%	
Regulated 5V ±5% ◉	**Unregulated 8V to 17V** ○

Table 16 - **CDH-FS Case Style Selection**		
The CDH-FS Default Case Style is Custom CAVU Casing Presented in the Product Catalog.		
Custom CAVU Casing ◉	**OpenVPX 3U 10Slots** ○	**OpenVPX 6U 5Slots** ○

Table 17 - **CDH-FS Connector Style**		
The CDH-FS Default Connector Type is Micro-D. For Custom Mix please contact us.		
Micro-D ◉	**Circular** ○	**Custom Mix** ○

Table 18 - **Transport Casing**	
The CDH-FS Default Transport Casing is ABS Foamed Box	
IP67 ABS Hard Case with PU Foam ◉	**Molded Insta-Pak Foam Carton** ○

Table 19 - **Transport Method**		
The CAVU Default Transport Method is Air Express		
Air Express ◉	**Pick Up by Customer at CAVU Aerospace UK** ○	**Custom (contact us)** ○

Table 20 - **CDH-FS Unified Tester**	
The CDH-FS Unified Tester is a comprehensive hardware and software solution that streamlines testing of all CDH-FS functionalities. This complete package, including essential connectors and cables, enables rapid verification for all your CDH-FS units. You only need one CDH-FS-UT.	
Include CDH-FS-UT in the Order	☐
CDH-FS-UT PC Connection	
Sample Snapshot of CDH-FS-UT Desktop App	

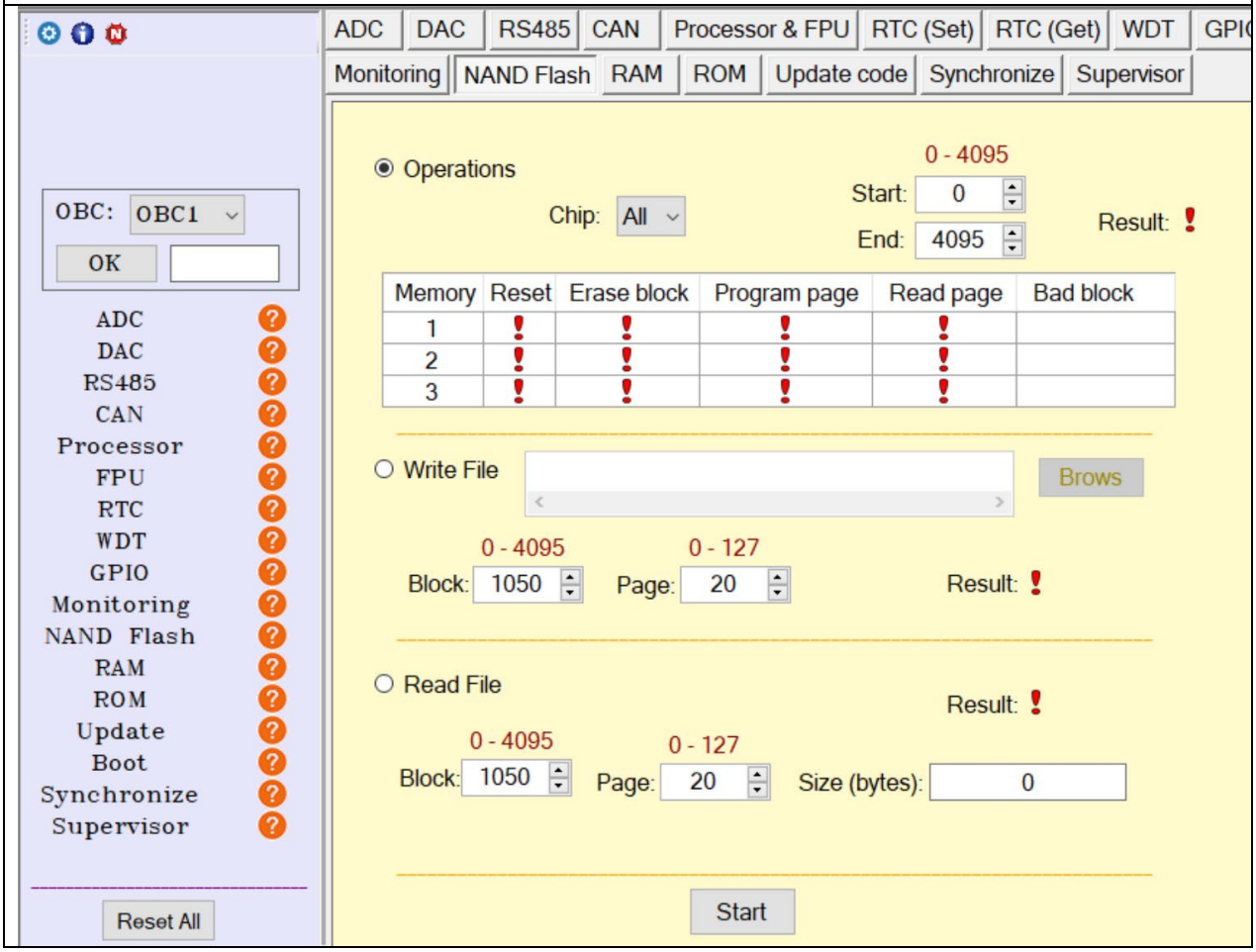

Table 21 - **CDH-FS Additional Comments and Requirements**

Table 22 - **Completion and Submission**			
Completion Date		07-Apr-2024	
Submitter Name			
Read Only	Edit	Save Form	Submit Form