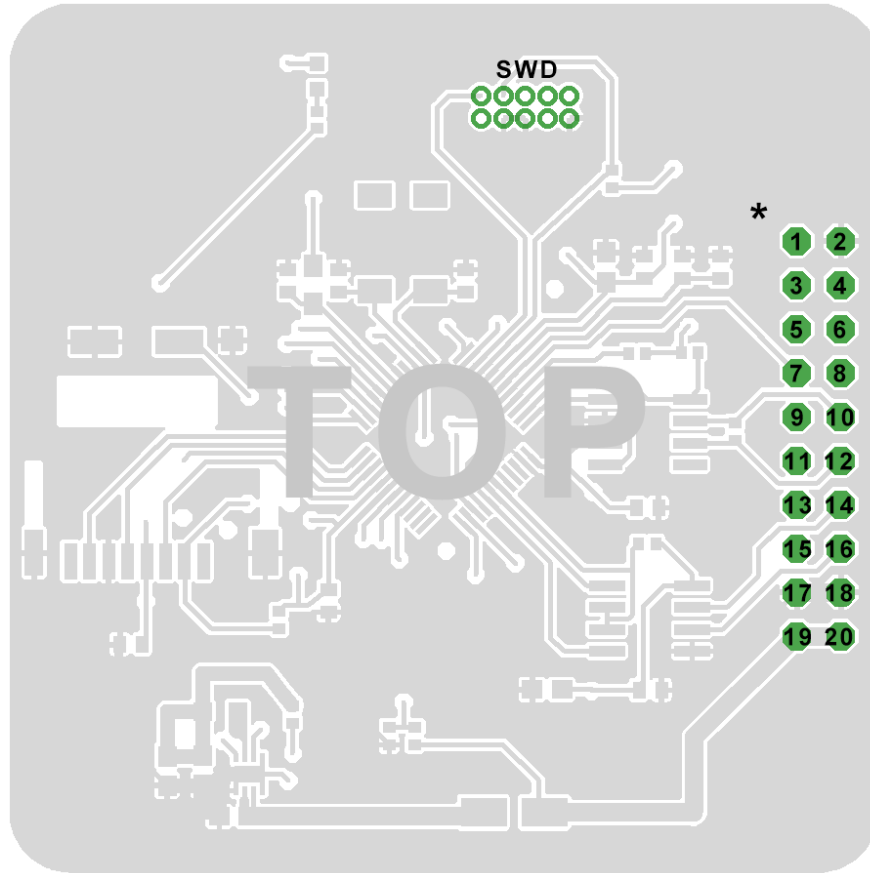


FAR/MARS AVIONICS PINOUT



FULL PIN FUNCTION FOUND ON SAMC21G "I/O Multiplexing & Considerations", pg. 30 of Datasheet

Physical PIN #	Primary Function	SAMC21 PIN #	Supply	ADC	SD-ADC(16-bit)	PWM	SERCOM A	MISC
1	5V	-						
2	GND	-						
3	Multi-Function I/O	PB02	5V	AIN10			SER5:0	
4	Multi-Function I/O	PB03	5V	AIN11			SER5:1	
5	Multi-Function I/O	PA02	5V	AIN0				DAC
6	Multi-Function I/O	PB08	5V	AIN2	SDADC1:N	TC4:0	SER4:0	
7	Digital I/O	PA28	5V					
8	Multi-Function I/O	PB09	5V	AIN3	SDADC1:P	TC4:1	SER4:1	
9	Multi-Function I/O	PA04	5V	AIN4		TC0:0	SER0:0	REFB
10	CAN H	-						
11	Multi-Function I/O	PA05	5V	AIN5		TC0:1	SER0:1	
12	CAN L	-						
13	Multi-Function I/O	PA06	5V	AIN6	SDADC0:N	TC1:0	SER0:2	
14	RS485 B	-						
15	Multi-Function I/O	PA07	5V	AIN7	SDADC0:P	TC1:1	SER0:3	
16	RS485 A	-						
17	GND	-						
18	GND	-						
19	VIN/BATT	-						
20	VIN/BATT	-						

Lady Elizabeth Specific

Physical PIN #	Primary Function	SAMC21 PIN #	Supply	Static Hot Fire	Launch	Description
1	5V	-		UNUSED	UNUSED	
2	GND	-		UNUSED	UNUSED	
3	12 bit ADC	PB02	5V	TBD	UNUSED	TBD
4	12 bit ADC	PB03	5V	TBD	UNUSED	TBD
5	12 bit ADC	PA02	5V	Liquid Methane Tank PT	Liquid Methane Tank PT	1500PSI 0.5-4.5V Analog PT
6	12 bit ADC	PB08	5V	Liquid Oxygen Tank PT	Liquid Oxygen Tank PT	1500PSI 0.5-4.5V Analog PT
7	Digital I/O	PA28	5V	UNUSED	UNUSED	
8	16 bit SDADC	PB09	5V	Helium Tank PT	Helium Tank PT	5800PSI 0-5V Analog PT
9	Multi-Function I/O	PA04	5V	UNUSED	UNUSED	
10	CAN H	-		UNUSED	UNUSED	
11	Multi-Function I/O	PA05	5V	UNUSED	UNUSED	
12	CAN L	-		UNUSED	UNUSED	
13	12 bit ADC	PA06	5V	TBD	UNUSED	TBD
14	RS485 B	-		Ground Coms	Ground Coms	Up to 1500m, Half-Duplex
15	16 bit SDADC	PA07	5V	Chamber Pressure PT	Chamber Pressure PT	TBD
16	RS485 A	-		Ground Coms	Ground Coms	Up to 1500m, Half-Duplex
17	GND	-		Ducer GND	Ducer GND	Ducer GND
18	GND	-		11.1V 3S LiPo Ground	11.1V 3S LiPo Ground	11.1V 3S LiPo Ground
19	VIN/BATT	-		Ducer VOUT	Ducer VOUT	Ducer VOUT
20	VIN/BATT	-		11.1V 3S LiPo Power In	11.1V 3S LiPo Power In	11.1V 3S LiPo Power In