

TangerineSDR Product Matrix

Rev 4.1

01-Aug-19

Part number	Name	Description	Target
Reserved (0xxx)		Reserved for specials	
Clock Modules - non-GPS (10xx)			
TSDR-TIC-1001	Tangerine Inexpensive Clock	Crystek CVHD-950 / Si5344	P4G, Exp
Clock Modules - GPS (11xx)			
TSDR-TOC-1100	Tangerine Oven-controlled Clock		Exp
TSDR-TUC-1101	Tangerine ublox GPSDO	uBlox LEA-M8F / Si5344	PSWS, P4G
TSDR-TLC-1102	Tangerine LTE Lite GPSDO	Jackson Labs LTE Lite / Si5344	PSWS, P4G
Data Engines - Intel FPGA (2xxx)			
TSDR-IDE-2000-M	Tangerine Inexpensive Data Engine, Intel	MAX 10M50 DE	SWS, P4G, Low Cost
TSDR-IDE-2001-CV	Tangerine Advanced Data Engine, Intel	Cyclone V CVA9 DE	P4G, Exp
Data Engines - Intel SoC (3xxx)			
TSDR-SIDE-3000-SoC	Tangerine SoC Data Engine, Intel	Cyclone V SoC DE	P4G Mid Cost
Data Engines - Ultrascale SoC (4xxx)			
TSDR-SXDE-4000-SoC	Tangerine SoC Data Engine, Xilinx Ultrascale	Ultrascale ZU3EG SoC DE	P4G, Mid Cost
RF Modules - DDC RX (5xxx)			
TSDR-RXM-5000S	Tangerine Receiver Module, 12-bit	single 12-bit 80Msps ADC	Low Cost
TSDR-RXM-5000D	Tangerine Receiver Module, dual 12-bit	dual 12-bit 80Msps ADC	low cost, I/Q input
TSDR-RXM-5001D	Tangerine Receiver Module, dual 14-bit	LTC-2145 dual 14-bit ADC 122.88Msps	PSWS
RF Modules - DUC TX (6xxx)			
TSDR-TXM-6000	Tangerine Transmitter Module, ADI9744	AD9744 dual 14-bit DAC 210Msps	PSWS opt
RF Modules - Integrated RX/TX (7xxx)			
TSDR-TRXM-7000	Tangerine Transceiver - ADI9361	ADI 9361 70MHz - 6GHz	
TSDR-TRXM-7001	Tangerine Transceiver - Lime 7002	Lime 7002/8001+ 10MHz - 10GHz	Wide Band, P4G
Misc Additional Hardware (8xxx)			
TSDR-MAG-8000	Tangerine Magnetometer	Remote PMOD Magnetometer	PSWS
M.2 Adapters - M.2 to XX (90xx)			
TSDR-TMH-9000	Tangerine M.2 to HSMC Adapter	M.2 to HSMC	for SoCkit
TSDR-TMF-9001	Tangerine M.2 to FMC Adapter	M.2 to FMC	

Shield Adapters - Arduino (91xx)			
TSDR-TAS-9100	Tangerine Arduino Shield Adapter	Arduino shield	
Shield Adapters - Click (92xx)			
TSDR-TCS-9200	Tangerine Click Shield Adapter	Dual click shield	
Shield Adapters - Mixed I/O (93xx)			
TSDR-TXS-9300	Tangerine PMOD_Arduino Shield Adapter	Quad PMOD + click + Arduino	
Fan Shields - Basic (94xx)			
TSDR-TFS-9400	Tangerine Basic Fan Shield		

TangerineSDR Documents		Filename
TSDR-SYS-REQ	Requirements - TangerineSDR System	TSDR_SYS_REQ_TangerineSDR_System_V1_0.pdf
TSDR-PRO-LCC	Protocol - TangerineSDR Local Command and Control (LCC)	TSDR_PRO_LCC_TangerineSDR_LCC_V1_0.pdf
TSDR-PRO-RCC	Protocol - TangerineSDR Remote Command and Control (RCC)	TSDR_PRO_RCC_TangerineSDR_RCC_V1_0.pdf
TSDR-CKM-REQ	Requirements - TangerineSDR Clock Module	TSDR_CKM_REQ_TangerineSDR_Clock_Module_V1_0.pdf
TSDR-CKM-ICD	Interface Control Document - TangerineSDR Clock Module	TSDR_CKM_ICD_TangerineSDR_Clock_Module_V1_0.pdf
TSDR-DE-REQ	Requirements - TangerineSDR Intel FPGA Data Engine	TSDR_DE_REQ_TangerineSDR_Intel_DE_V1_0.pdf
TSDR-DE-ICD	Interface Control Document - TangerineSDR Intel FPGA Data Engine	TSDR_DE_ICD_TangerineSDR_Intel_DE_V1_0.pdf
TSDR-DE-HWS-MAX10	Hardware Specification - TangerineSDR MAX10 Data Engine	TSDR_DE_HWS_MAX10_TangerineSDR_MAX10_DE_V1_0.pdf
TSDR-DE-HWS-CVA9	Hardware Specification - TangerineSDR Cyclone V A9 Data Engine	TSDR_DE_HWS_CVA9_TangerineSDR_CycloneV_DE_V1_0.pdf
TSDR-RFM-REQ	Requirements - TangerineSDR RF Module	TSDR_RFM_REQ_TangerineSDR_RF_Module_V1_0.pdf
TSDR-RFM-ICD	Interface Control Document - TangerineSDR RF Module	TSDR_RFM_ICD_TangerineSDR_RF_Module_V1_0.pdf
TSDR-MAG-REQ	Requirements - TangerineSDR Magnetometer	TSDR_MAG_REQ_TangerineSDR_Magnetometer_V1_0.pdf
TSDR-MAG-IDC	Interface Control Document - TangerineSDR Magnetometer	TSDR_MAG_ICD_TangerineSDR_RF_Magnetometer_V1_0.pdf
Personal Space Weather Station Documents		
PSWS-SYS-REQ	Requirements - Personal Space Weather Station System	PSWS_SYS_REQ_PSWS_System_V1_0.pdf
PSWS-SYS-OBJ	Objectives - Personal Space Weather Station	PSWS_SYS_OBJ_PSWS_Objectives_V1_0.pdf
PSWS-CCS-FS	Functional Specification - PSWS Central Control System (CCS)	PSWS_CCS_FS_002_PSWS_Central_Control_System_V1_0.pdf
PSWS-LH-FS	Functional Specification - PSWS Local Host	PSWS_LH_FS_PSWS_Local_Host_V1_0.pdf
PSWS-CKM-HWS	Hardware Specification - PSWS Clock Module	PSWS_CKM_HWS_PSWS_Clock_Module_V1_0.pdf