

Project Name	TITAN RF PASS
BoM Revision	Rev 0.2
Board name	TITAN RF PASS Main Board
Board revision	Rev A
Date	29-Oct-18

TITAN RF PASS Main Board BOM												
IS Component	S.No	LEVEL	Mfg . Part No	Manufacturer	Description	Qty	Ref Designator	First alternate Mfg . Part No	First alternate part manufacturer	Second alternate Mfg . Part No	Second alternate part manufacturer	Remarks
	1		C0603X104KARACTU	Kemet	CAP CER 0.1UF 16V X7R 0603	22	C3,C4,C7,C10,C12,C14-C16,C19,C26,C29,C45,C69,C70,C72,C73,C78-C82,C85	0603YC104KAT2A	AVX	CS0603KRX7R78B104	Yageo	
	2		C1206C105KARACTU	Kemet	CAP CER 1UF 16V X7R 1206		2C8,C71	1206YC105JA7A	AVX	CC1206JXX7R78B105	Yageo	
	3		C0603T103K5RACTU	Kemet	CAP CER 10000PF 50V X7R 0603		7C9,C18,C38,C39,C43,C44,C58	CGA3E2X7R1H103K080AA	TDK	500R14W103KV4T	Johanson Dielectrics Inc.	
	4		GRM188R71A225KE15D	Murata	CAP CER 2.2UF 10V X7R 0603		6C13,C34,C35,C42,C51,C57	CG0603C225K8RACTU	Kemet	CL1608X7R1A225K080AE	TDK	
	5		C0603C150J5GACTU	Kemet	CAP CER 150PF 50V COG/NP0 0603		2C30,C36	CGA3E2C0G1H150J080AA	TDK	9603SA150JAT2A	AVX	
	6		GRM1885C1H152JAD1D	Murata	CAP CER 1500PF 50V COG/NP0 0603		2C47,C48	C0603C152J5GACTU	Kemet	CG3E2C0G1H152J080AA	TDK	
	7		GRM1885C1H122JAD1D	Murata	CAP CER 1200PF 50V COG/NP0 0603		2C49,C50	C0603C122J5GACTU	Kemet	CGA3E2C0G1H122J080AA	TDK	
	8		C0603C100J5GACTU	Kemet	CAP CER 100PF 50V COG/NP0 0603		1C54	0603SA100JA7A	AVX	251R145J100V4T	Johanson Technology Inc.	
	9		C0603C22J25GACTU	Kemet	CAP CER 2200PF 50V COG/NP0 0603		1C55	CG3E3C22H21J080AA	TDK	CL10C221J88NNNC	Samsung Electro-Mechanics	
	10		GRM1885C1H681JAD1D	Murata	CAP CER 680PF 50V COG/NP0 0603		2C56,C60	C0603H681J5GACTU	Kemet	CG3E3C0G1H68J080AA	TDK	
	11		C0603C101J5GACTU	Kemet	CAP CER 100PF 50V COG/NP0 0603		2C61,C64	CG3E3C0G1H101J080AA	TDK	9603SA101AT2A	AVX	
	12		C0402C270J5GACTU	Kemet	CAP CER 27PF 50V COG/NP0 0402		2C62,C63	CGA3E2C0G1H27J0508A	TDK	90R075270G0V4T	Johanson Technology Inc.	
	13		C0603C270J5GACTU	Kemet	CAP CER 27PF 50V COG/NP0 0603		1C64	CGA3E2C0G1H27J080AA	TDK			
	14		C3216X7R1C106K160AC	TDK	CAP CER 10UF 16V X7R 1206		1C74	C1206C106KARACTU	Kemet			
	15		C0603X105KARACTU	Kemet	CAP CER 1UF 16V X7R 0603		3C75-C77	CGA3E1X7R1C105K080AC	TDK	CL10B105MOBNNWC	Samsung Electro-Mechanics	
	16		C0603C470J5GACTU	Kemet	CAP CER 470PF 50V COG/NP0 0603		1C83	0603SA470JA7A	AVX			
	17		ACM2520-102-2P-1002	TDK	CMC 200MA 21N 1 KOHM SMD		2CC1,CC4					
	18		ACM70V-703-2PL-TL00	TDK	CMC 4A 21N 700 OHM SMD AEC-Q200		2CC2,CC3					
	19		CZRU52C3-HF	Comchip Technology	DIODE ZENER 3V 150MW 0603		1D2					
	20		PESD3V3U1UB,115	Nexperia USA Inc.	TVS DIODE 3.3VVMV SOD523		1D3					
	21		D12VOL1B2LP-7B	Diodes Incorporated	TVS DIODE 12V 25V DFN1006-2		8D11-D16,D18,D19					
	22		MM121608B121C1TAH0	TDK	FERRITE BEAD 120 OHM 0603 1LN		3F81-F83					
	23		73412-011D	Molex	CONN UMC RCPT STR 50 OHM SMD		1J2					
	24		502352-0400	Molex	CONN HEADER 4POS 2MM R/A SMD		1J3					
	25		502584-0660	Molex	CONN RCPT 6CKT VERT BEIGE		2J4,P1					
	26		100BCS-151XLB	Collcraft	Fixed Inductors 100BSC Ceramic Chip 150 nH 5 % 0.58 A		1L8					
	27		100BCS-331XLB	Collcraft	Fixed Inductors 100BSC Ceramic Chip 330 nH 5 % 0.45 A		1L9					
	28		CLP-130-Q2-Q-D-K-TR	Samtec Inc	CONN RECEPT 40POS DUAL SMD		1P2					
	29		502584-1060	Molex	CONN RCPT 10CKT VERT BEIGE		1P7					
	30		BSS138LT1G	ON Semiconductor	MOSFET N-CH 50V 200MA SOT-23		12Q1-Q3,Q9,Q11,Q13,Q15,Q16,Q19,Q22,Q23,Q25					
	31		FDN306P	ON Semiconductor	MOSFET P-CH 12V 2.6A SSO23		9Q6-Q8,Q12,Q14,Q16,Q20,Q21,Q24					
	32		NDS331N	ON Semiconductor	MOSFET N-CH 20V 1.3A SSO23		1Q10					
	33		RCRW0603100KFKEA	Vishay Dale	RES SMD 100K OHM 1% 1/10W 0603		R1,R9,R11,R18,R27,R29,R32,R41,R46,R49,R54,R56,R58,R63,R105,R106,R122,R124,R140	RC0603FR-07100KL	Yageo	KTR03E2PF1003	Rohm Semiconductor	
	* 34		RCRW120662X0FKEA	Vishay Dale	RES SMD 62K OHM 1% 1/4W 1206		1R2	RC1206FR-0762KL	Yageo	KTR18E2PF6202	Rohm Semiconductor	
	35		RCRW0603100KFKEA	Vishay Dale	RES SMD 1K OHM 1% 1/10W 0603		R3,R17,R22,R35,R50,R55,R57,R93-R95,R103,R107,R108,R112,R137,R138	RC0603FR-071KL	Yageo	KTR03E2PF1001	Rohm Semiconductor	
	* 36		RCRW120624K0FKEA	Vishay Dale	RES SMD 24K OHM 1% 1/4W 1206		1R8	RC1206FR-0724KL	Yageo	KTR18E2PF2402	Rohm Semiconductor	
	* 37		RCRW12061K00FKEA	Vishay Dale	RES SMD 1K OHM 1% 1/4W 1206		R12,R20,R109-R111,R117-R120,R123,R132	RC1206FR-071KL	Yageo	KTR18E2PF1001	Rohm Semiconductor	
	38		RCRW060362K0FKEA	Vishay Dale	RES SMD 62K OHM 1% 1/10W 0603		6R34,R45,R53,R62,R104,R139	RC0603FR-0762KL	Yageo	KTR03E2PF6202	Rohm Semiconductor	
	* 39		RCRW1210200R0FKEA	Vishay Dale	RES SMD 200 OHM 1% 1/2W 1210		2R44,R52	RC1210FR-07200RL	Yageo	ERJ-14NF2000U	Panasonic	
	40		RCRW121015R0FKEA	Vishay Dale	RES SMD 15 OHM 1% 1/2W 1210		2R47,R48	RC1210FR-0715RL	Yageo	ERJ-14NF1500U	Panasonic	
	41		RCRW120647K5FKEA	Vishay Dale	RES SMD 47.5K OHM 1% 1/4W 1206		1R60	RC1206FR-0747K5L	Yageo	KTR18E2PF4752	Rohm Semiconductor	
	42		RCRW060328K0FKEA	Vishay Dale	RES SMD 28K OHM 1% 1/10W 0603		2R61,R68	RC0603FR-0728KL	Yageo	ERJ-3EK72802V	Panasonic	
	43		RCRW060310K0FKEA	Vishay Dale	RES SMD 10K OHM 1% 1/10W 0603		10R65,R66,R75-R77,R81,R84,R85,R88,R89	RC0603FR-0710KL	Yageo	KTR03E2PF1002	Rohm Semiconductor	
	44		RCRW060324K0FKEA	Vishay Dale	RES SMD 24K OHM 1% 1/10W 0603		1R71	RC0603FR-0724KL	Yageo	KTR03E2PF2402	Rohm Semiconductor	
	45		RCRW0603000Z0FKEA	Vishay Dale	RES SMD 0 OHM JUMPER 1/10W 0603		4R113-R116	AC0603FR-070RL	Yageo	ERJ-3GEY000V	Panasonic	
	46		RCRW0603100R0FKEA	Vishay Dale	RES SMD 100 OHM 1% 1/10W 0603		1R121	RC0603FR-07100RL	Yageo	KTR03E2PF1000	Rohm Semiconductor	
	47		TLS850D0TAV33ATMA1	Infineon	IC REG LINEAR 500MA TO263-7		1U1					
	48		74AUP1G17GW,125	Nexperia USA Inc.	IC BUFF SCHMT TNG LOW PWR STSSOP		2U2,U9					
	49		LT2859H599PBF	Linear Technology	IC TXRX RS485 20MBPS 8-SOIC		2U3,U10					
	50		24LC01BRT-E/QT	Microchip	IC EEPROM 1KBIT 400KHZ SOT23-S		1U4					
	51		PIC24F64GA106-E/P/T	Microchip	IC MCU 16BIT 64KB FLASH 64TQFP		1U6					
	52		TRF7970ARHBR	Texas Instruments	IC RFID/NFC AFE 13.56MHZ 32QFN		1U8					
	53		ABMBAIG-13.560MHZ-12-2Z-T3	Abracon LLC	CRYSTAL 13.560MHZ 12PF SMD		1Y1					
	54		ABLS-4.000MHZ-K4T	Abracon LLC	CRYSTAL 4.000MHZ 18PF SMD		1Y2					
	55		965074	Refer Honeywell drawing	M3 board standoff		1Z1					
	56		965073	Refer Honeywell drawing	M1 board standoff		3Z12-Z14					
	57		CES-110-01-G-S	Samtec Inc.	LOW PROFILE .025" SQUARE STRIPS		1P3					
	58	Wire Assembly	921180	Refer Honeywell drawing	CHASSIS WIRE ASSEMBLY		1					
	59	PCB	911120	UEI	PCB, MAIN BOARD, RFPASS, REA		1					
Do not Populate components List												
	1		RCRW060310K0FKEA	Vishay Dale	RES SMD 10K OHM 1% 1/10W 0603		1R33					
	2		GRM1885C1H681JAD1D	Murata	CAP CER 680PF 50V COG/NP0 0603		1C59					
	3		RCRW0603120R1FKEA	Vishay Dale	RES SMD 120 OHM 5% 1/10W 0603		2R21,R125					
	4		C0603X104KARACTU	Kemet	CAP CER 0.1UF 16V X7R 0603		2C1,C86					
	5		RCRW0603100KFKEA	Vishay Dale	RES SMD 100K OHM 1% 1/10W 0603		4R30,R42,R78,R126					
	* 6		RCRW251215R0FKEGHP	Vishay Dale	RES SMD 15 OHM 1% 1.5W 2512		4R150,R151,R152,R153					
	7		NDS331N	ON Semiconductor	MOSFET N-CH 20V 1.3A SSO23		1Q28					
	8		RCRW060362K0FKEA	Vishay Dale	RES SMD 62K OHM 1% 1/10W 0603		3R143,R144,R145					
	* 9		RCRW12061K00FKEA	Vishay Dale	RES SMD 1K OHM 1% 1/4W 1206		2R148,R149					
	10		BSS138LT1G	ON Semiconductor	MOSFET N-CH 50V 200MA SOT-23		1Q27					
	11		FDN306P	ON Semiconductor	MOSFET P-CH 12V 2.6A SSO23		1Q26					
	* 12		RCRW120647K5FKEA	Vishay Dale	RES SMD 47.5K OHM 1% 1/4W 1206		1R147					
	13		RCRW060328K0FKEA	Vishay Dale	RES SMD 28K OHM 1% 1/10W 0603		1R146					
	14		640452-5	TE	CONN HEADER VERT 5POS .100 TIN		1P8					

\* indicates IS components

**Rev 0.2**

Titltle Block Board Revision is updated to Rev A and Date changed to 29-OCT-2018

Added PCB part no 911120

MCU Programming Interface connector P8 is moved to DNI

P2 connector part no changed to samtech CLP-120-02-G-D-K-TR and added alternate connector part no