



Bill of Materials
TI DESIGNS
TIDM-RM46XDRV8301KIT
RM46 Control Card

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part (Digikye)	PCB Footprint	Note
1	2	C1,C2	10pF	Cap: 10 pF 50v	AVX Corporation	04025U100FAT2A	478-5717-1-ND	0402	loading for oscillator
2	2	C101,C102	27pF	Cap: 27pF, > 5v	Yageo	CC0402JRNPO9BN270	311-1019-1-ND	0402	loading for oscillator
3	2	C26,C27	100pF	Cap: 100pF	AVX Corporation	04025A101FAT2A	478-3658-1-ND	0402	USB VCC 3.3 decoupling
4	4	C66, C69, C79-C80	10nF	Cap: 10nF, 50v	TDK Corporation	C1005X7S2A103K050BB	445-5199-6-ND	0402	
5	42	C6-C11, C14-C22, C70-C78,C111-C122,C155-C160	0.1uF	Cap: 0.1uF, 50v	TDK Corporation	C1005X7R1H104M050BB	445-5933-1-ND	0402	decoupling
6	2	C28, C29	2.2uF	Cap: 2.2uF,>6v	TDK Corporation	C1608Y5V1C225Z	445-3451-1-ND	0603	
7	3	C131-C133	4.7uF	Cap: 4.7uF	Taiyo Yuden	JMK107BJ475MA-T	587-1255-1-ND	0603	decoupling
8	1	C45	10uF	Cap: 10uF, 50v	TDK Corporation	C3216X5R1H106K160AB	445-5998-6-ND	1206	
9	5	C42-C44, C141-C142	10uF	Cap: 10uF	Taiyo Yuden	JMK107BJ106MA-T	587-1256-1-ND	0603	VREG
10	2	C67,C68	22uF	Cap: 22uF 10v	Kemet	T491A226M010ZT	495-2207-1-ND	"A" 3216-18	Bulk capacitor
11	8	R2-R6, R8-R9, R101	0ohm	Res: 0	Vishay Dale	CRCW04020000Z0ED	541-0.0JCT-ND	0402	
12	31	R31-R34, R81-R100, R102, R111-R115, R117	50ohm	Res: 50	Panasonic Electronic Components	ERJ-2RKF49R9X	P49.9LCT-ND	0402	
13	3	R36, R105, R106	200ohm	Res:200	Vishay Dale	CRCW0402200RFKED	541-200LCT-ND	0402	
14	5	R26-R28, R50,R51	360ohm	Res:360	Panasonic Electronic Components	ERJ-2GEJ361X	P360JCT-ND	0402	
15	8	R13, R120-R123, R127, R138, R142	470ohm	Res:470	Panasonic Electronic Components	ERJ-2GEJ471X	P470JCT-ND	0402	
16	16	R42-R44,R67,R128-R137, R139, R144	1Kohm	Res: 1K	Vishay Dale	CRCW04021K00FKED	541-1.00KLC-ND	0402	
17	12	R10-R12, R16-R17, R35, R37-R41, R141	2.2Kohm	Res: 2.2K	Vishay Dale	CRCW04022K20FKED	541-2.20KLC-ND	0402	
18	3	R45, R54,R55	4.87Kohm	Res: 4.87k	Panasonic Electronic Components	ERJ-2RKF4871X	P4.87KLC-ND	0402	
19	1	R20	40.2ohm	Res: 40.2	Panasonic Electronic Components	ERJ-2RKF40R2X	P40.2LDKR-ND	0402	
20	1	R21	80.6ohm	Res: 80.6	Panasonic Electronic Components	ERJ-2RKF80R6X	P80.6LDKR-ND	0402	
21	5	R150-R154	10Kohm	Res: 10K	Panasonic Electronic Components	ERJ-2RKF1002X	P10.0KLDKR-ND	0402	
22	1	R155	10Kohm	Res: 10K	Panasonic Electronic Components	ERJ-3EKF1002V	P10.0KHDKR-ND	0603	
23	1	R18	22Kohm	Res: 22K	Panasonic Electronic Components	ERJ-2RKF2202X	P22.0KLDKR-ND	0402	
24	1	R19	100Kohm	Res: 100K	Vishay Dale	CRCW0402100KFKED	541-100KLC-ND	0402	
25	1	R24	105Kohm	Res: 105K	Panasonic Electronic Components	ERJ-2RKF1053X	P105KLDKR-ND	0402	
26	4	RN1-RN4	33ohm	Res Array: 33	Panasonic Electronic Components	EXB-28V330JX	Y7330CT-ND	0804	RES ARRAY 33 OHM
27	2	D17, D18		LED: Orange - SMT 0603	Lite-On Inc	LTST-C190KFKT	160-1434-1-ND	0603 SMD	LED YELLOW ORANGE CLEAR
28	1	D7		LED: White - SMT 0603	Panasonic Electronic Components	LNJ026X8BRA1	P13483CT-ND	0603	LED WHITE HIGH BRIGHT USS 0603
29	1	D1		LED: Red - SMT 0603	Panasonic Electronic Components	LNJ212R8ARA	P11133CT-ND	0603	red LED
30	6	D8, D15, D102-D105		LED: Blue - SMT 0603	Panasonic Electronic Components	LNJ926W8CRA	P13484CT-ND	0603	LED BLUE HIGH BRIGHT USS 0603
31	1	D16		Diode	On Semiconductor	MBR340T3G	MBRS340T3GOSDKR-ND	SMC	DIODE SCHOTTKY 40V 4A
32	3	L3, L101-L102		Ferrite	Laird-Signal Integrity Products	H20805E601R-10	240-2399-1-ND	0805 SMD	FERRITE 500MA 600 OHM
33	1	L4		Inductor: 33uH	Epcos (TDK)	B82464G4333M	495-1803-1-ND	SMD	FIXED IND 33UH 1.85A 75 MOHM
34	1	J101		USB-B-mini-smt	Hirose Electric Co Ltd	UX60-MB-5ST	H2959CT-ND	USB_MINIB_REC	CONN RECEIPT MINI USB2.0 5POS
35	1	JP1		Power Jack	CUi Inc	PJ-006A-SMT-TR	CP-006APJDKR-ND	SMD	CONN POWER JACK 2X5.5MM VERT
36	1	P5		RJ45 Jack	Pulse Electronics Corporation	J0011D21BNL	553-1485-ND	rj45-pulse_J0	CONN MAGJACK 1PORT 100 BASE-TX
37	1	Q1		Power MOS FET	Fairchild Semiconductor	FDD8778	FDD8778TR-ND	D-Pak, TO-252-3	MOSFET N-CH 25V 35A
38	3	S1-S3		Switch: PB / SM	C&K Components	PTS635SL25SMTR LFS	CKN9119CT-ND		Reset, SWITCH TACTILE SPST-NO 0.05A 12V
39	1	SW1		Switch: 8POS	C&K Components	TDA08H05B1R	CKN9504DKR-ND		SWITCH DIP 8POS HALF PITCH 24V
40	1	T101		IC:IRLML6302	International Rectifier	IRLML6302GTRPBF	IRLML6302GTRPBFDKR-ND	SOT-23-3	MOSFET P-CH 20V 0.78A
41	1	U1		IC:RM46-337	Texas Instruments	RM46L852ZWTTR	NFBGA-337		
42	4	U2-U5		IC: TP4E002	Texas Instruments	TPD4E002DRLR	296-21694-1-ND	SOT-553	ic.transient voltage suppressor diode 3VWM
43	3	U6-U8		IC: SN74CBTLV3257	Texas Instruments	SN74CBTLV3257PWR	296-9138-1-ND	TSSOP16	IC LV FET MUX/DEMUX
44	1	U12		IC: DP83640	Texas Instruments	DP83640TVV	DP83640TVV-ND	48LQFP	TXRX PHY IEEE 1PORT 1588

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45	1	U101		IC: FT2232H	FTDI, Future Technology Devices International Ltd	FT2232HL-REEL	768-1024-1-ND	QUAD_50M/64-LQFP	IC USB HS DUAL UART/FIFO
46	1	U102		IC: 93LC56	Microchip Technology	93LC56C-I/SN	93LC56C-I/SN-ND	SOIC8	IC EEPROM 2KBIT 3MHZ
47	1	U103		IC: TPD2E001	Texas Instruments	TPD2E001DRLR	296-21883-6-ND	SOT-5	TVS DIODE 5.5VWM 100VC
48	1	U104		IC: TPS73033	Texas Instruments	TPS73033DBVR	296-17580-6-ND	SOT-23-5	IC REG LDO 3.3V 0.2A
49	1	U109		IC: XC2C32A_VQ44	Xilinx Inc	XC2C32A-6VQG44C	122-1404-ND	44VQFP	IC CPLD 32MC 5.5NS
50	1	U118		IC: SN74AHC1G14	Texas Instruments	SN74AHC1G14DBVR	296-1092-6-ND	SOT-23-5	IC SCHMITT-TRG INV GATE
51	1	U119		IC: TLV810SDBZR	Texas Instruments	TLV810SDBZR	296-29200-1-ND	SOT-23-3	IC VOLT SUPERVISR 2.93V
52	1	U121		IC: SN74LVC125APWR	Texas Instruments	SN74LVC125APWR	296-1222-6-ND	14-TSSOP	IC BUS BUFF TRI-ST QD
53	3	U115,U116,U117		IC: ISO7240MDW	Texas Instruments	ISO7240MDW	296-22629-5-ND	16-SOIC	DGTL ISO 2.5KV GEN PURP
54	1	U122		IC: TL7700CPW	Texas Instruments	TL7700CPWR	296-13050-6-ND	8-TSSOP	IC SUPPLY VOLT SUPERVISOR
55	1	VR1		IC: TPS65381	Texas Instruments	TPS65381-Q1		32-HTSSOP	VREG
56	1	Y3	16MHz	16MHz Crystal	ECS Inc	ECS-160-20-23A-EN-TR	XC982CT-ND	2-SMD	Crystal 16.0000MHz 30ppm 20pF 60 Ohm -40°C -85°C
57	1	Y5	50MHz	50MHz Oscillator	Abracon LLC	ASV-50.000MHZ-EJ-T	535-9330-1-ND	SMD	OSC XO 50.000MHZ HCMOS
58	1	Y101	12MHz	12MHz CRYSTAL	ECS Inc	XC1118CT-ND	XC1118CT-ND	2-SMD	Crystal 12.0000MHz 30ppm 20pF 80 Ohm -20°C -70°C
NO POP	16	C46-C57, C60-C63							NO POP
NO POP	2	R14,R15	0ohm	Res: 0				0402	NO POP
NO POP	3	R103,R104,R107	0ohm	Res: 0				0402	NO POP
NO POP	1	R140	200ohm	Res: 200				0402	NO POP
NO POP	1	J102		Header: 2x1 .100					NO POP
NO POP	3	R124-R126	1Kohm	Res: 1k					NO POP
NO POP	1	R23	470ohm	Res: 470				0402	NO POP
NO POP	9	TP1, P8, P11-P17		TEST Point					NO POP
NO POP	1	P4		DIMM-100					NO POP
NO POP	1	R22	0ohm	Res: 0	Yageo	RC0805JR-070RL	311-0.0ARCT-ND	0805	NO POP
NO POP	1	S4		Switch: PB / SM	C&K Components	PTS635SL25SMTR LFS	CKN9119CT-ND		SWITCH TACTILE SPST-NO 0.05A 12V

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