



Project FmcDIO16chTTLa
Title **FMC Digital IO**
EDA Number **EDA-02064-V1-0**
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Rev.
Drawn by N. Lopez
EDMS URL <https://edms.cern.ch/nav/EDA-02064/EDA-02064-V1-0>

Ref	Qty	Scem	Description	Val&Device	Manufacturer P/N	Case
R1	1		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	10k	GENERIC R0603_10K_0.1%_0.063W_10PPM	0603
R2, R25	2		±1% 0.125W ±100ppm/°C General Purpose Thick Film Chip Resistor	1M	GENERIC R0805_1M_1%_0.125W_100PPM	0805
R3	1		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	3k24	GENERIC R0603_3K24_0.1%_0.063W_10PPM	0603
R4 > R20 R22, R23 R26, R27 R61 > R65 R67 > R69	29		±1% 0.125W ±100ppm/°C General Purpose Thick Film Chip Resistor	10k	GENERIC R0805_10K_1%_0.125W_100PPM	0805
R21 R24 R28 R66	4		±1% 0.125W ±100ppm/°C General Purpose Thick Film Chip Resistor	750	GENERIC R0805_750R_1%_0.125W_100PPM	0805
R29 > R60	32		±1% 0.25W ±100ppm/°C General Purpose Thick Film Chip Resistor	100	GENERIC R1206_100R_1%_0.25W_100PPM	1206
C1	1		±10% 50V X7R SMD Multilayer Chip Ceramic Capacitor	10nF	GENERIC CC0603_10NF_50V_10%_X7R	0603
C2, C7	2		±5% 2000V C0G High Voltage MLC Chips	22pF	AVX 1206GA220JAT9A	1206
C3, C4	2		±10% 16V X7R SMD Multilayer Chip Ceramic Capacitor	4.7uF	GENERIC CC1206_4.7UF_16V_10%_X5R	1206
C5	1		±10% 6.3V Solid Tantalum Chip Capacitor	100uF	GENERIC CTE3528-21_100UF_6.3V_10%	B
C6 C8 > C10 C15 C20 > C23 C28, C29	11		±10% 50V X7R SMD Multilayer Chip Ceramic Capacitor	100nF	GENERIC CC0805_100NF_50V_10%_X7R	0805
C11 > C14 C16 > C19 C24 > C27 C30 > C33	16		±10% 50V X7R SMD Multilayer Chip Ceramic Capacitor	2.2nF	GENERIC CC0805_2.2NF_50V_10%_X7R	0805
L1	1		±20% 1.6A SMT Power Inductors	33uH	COILCRAFT MSS1038-333ML_LC	
D1	1		40V 3A Schottky Rectifier	15MQ040NPbF	VISHAY INTERTECHNOLOGY, INC. 15MQ040NPbF	DO-214AC
IC1	1		2A, Wide Input Range, Step-Down SWIFT Converter	TPS5420D	TEXAS INSTRUMENTS TPS5420D	SOIC8
IC2	1		64K I2C Serial EEPROM	24AA64T-I/MC	MICROCHIP TECHNOLOGY 24AA64T-I/MC	DFN8
IC3	1		2-Wire High-Accuracy Temperature Sensor	MCP9801-M/MS	MICROCHIP TECHNOLOGY MCP9801-M/MS	MSOP8
IC4, IC5	2		25 Ohms Octal Bus Transceiver With 3-State Outputs	SN74BCT25245DW	TEXAS INSTRUMENTS SN74BCT25245DW	SOIC24
IC6	1		2.5-V/3.3-V 16-Bit Bus Transceivers With 3-State Outputs	SN74ALVTH162245DL	TEXAS INSTRUMENTS SN74ALVTH162245DL	SSOP48
IC7	1		Hex Schmitt-Trigger Inverter	SN74HCT14D	TEXAS INSTRUMENTS SN74HCT14D	SOIC14

LD1	1		Dual 2mm Green LEDs CBI® Circuit Board Indicator (Without positioning pins)	571-0122F	DIALIGHT 571-0122F	
LD2, LD3	2		Surface Mount Green LED (0805 Case)	LGR971	OSRAM LGR971	0805
J1	1		36 contacts, Mini D Ribbon (MDR), .050" Boardmount Through-hole Right Angle Receptacle-Shielded,Diecast Body, 102 Serie		3M 10236-5212PC	
J2	1		160 contacts (4 rows cdgh) Surface Mount Male Connector, VITA 57		SAMTEC ASP-134488-01	
J3	1		50 (2x25) Position, 1.27mm Pitch, Surface Mount AMPMODU Male Connector (6.35mm Mated Height)		TYCO ELECTRONICS 5-104655-6	
J4 > J7	4		SMA 50 Ohm Straight Jack Receptacle - Surface Mount		JOHNSON 142-0711-201	
W1 > W8	1(8)	09.55.10.740.9	20 Contacts Straight Strip Header Pitch 2.54mm L=7.5mm "Mini-Wire-Wrap"		KONTEK COMATEL 386.0334.1.20.440	

<u>Dimensions:</u>	Through pins:	58
	SMD pins on TOP:	370
140 x 80 mm	SMD pins on BOTTOM:	213
	Total nb of pins:	641