



Project -  
 Title **VME FMC Carrier**  
 EDA Number **EDA-02030-V1-0**  
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 File EDA-02030-V1-0\_pcb-mat.xls  
 Date 26/07/2010

Rev.  
 Drawn by B. Civel  
 EDMS URL <https://edms.cern.ch/nav/EDA-02030/EDA-02030-V1-0>

Ref	Qty	Scem	Description	Val&Device	Manufacturer P/N	Case
R1, R2 R5 R16, R17 R28, R29 R45 > R47 R54 R57 R64 R66 R79 R86 R91 R96 R106 > R108 R116 R119 R123 > R125 R130 R134 R137 R141 R145, R146 R149, R150 R219 R224 R227 R229 R231 R238, R239 R253 R262, R263 R279 R283 R286	47		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	10k	GENERIC R0402_10K_1%_0.0625W_100PPM	0402
R3 R11, R12 R24	4		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	3k	GENERIC R0402_3K_1%_0.0625W_100PPM	0402
R4 R6 > R10 R13 > R15 R18 > R23 R80 > R83 R87 > R90	23		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	1k3	GENERIC R0402_1K3_1%_0.0625W_100PPM	0402
R25, R30	2		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	100k	GENERIC R0402_100K_1%_0.0625W_100PPM	0402
R26	1		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	2k87	GENERIC R0603_2K87_0.1%_0.063W_10PPM	0603
R27, R53	2		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	3k57	GENERIC R0603_3K57_0.1%_0.063W_10PPM	0603
R31 R41 R65 R70 R120 R162, R163 R176, R177 R202, R203 R251, R252	13		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	100	GENERIC R0402_100R_1%_0.0625W_100PPM	0402
R32 > R40 R43, R44 R55, R56 R71 > R78 R212	28		±1% 0.1W ±100ppm/°C General Purpose Thick Film Chip Resistor	4k7	GENERIC R0603_4K7_1%_0.1W_100PPM	0603

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R214 R233 R240, R241 R276, R277						
R42 R213 R215 R217, R218	5		1A (0.05R Max DC Resistance) Zero Ohm Jumper	0	GENERIC R0603_0R_JUMPER	0603
R48 R50 R60	3		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	4k99	GENERIC R0603_4K99_0.1%_0.063W_10PPM	0603
R49 R51 R61	3		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	2k49	GENERIC R0603_2K49_0.1%_0.063W_10PPM	0603
R52	1		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	1k15	GENERIC R0603_1K15_0.1%_0.063W_10PPM	0603
R58, R59 R62 R69	4		±1% 0.125W ±100ppm/°C General Purpose Thick Film Chip Resistor	2M2	GENERIC R0805_2M2_1%_0.125W_100PPM	0805
R63	1		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	30	GENERIC R0402_30R_1%_0.0625W_100PPM	0402
R67, R68 R92 R94, R95 R98 > R105 R110 > R115 R117, R118 R121, R122 R144 R164, R165 R204 R206 R235 R242	30		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	51	GENERIC R0402_51R_1%_0.0625W_100PPM	0402
R84, R85 R228 R230 R274, R275	6		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	1k	GENERIC R0402_1K_1%_0.0625W_100PPM	0402
R93 R133 R172 R175	4		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	5k1	GENERIC R0402_5K1_1%_0.0625W_100PPM	0402
R97 R136 R183 R185	4		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	4k12	GENERIC R0603_4K12_0.1%_0.063W_10PPM	0603
R109	1		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	240	GENERIC R0402_240R_1%_0.0625W_100PPM	0402
R126 > R129 R131 R135 R138 R170 R173 R184 R188 > R193 R200, R201 R207 > R211	23		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	200	GENERIC R0402_200R_1%_0.0625W_100PPM	0402
R132 R171 R174	3		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	1k6	GENERIC R0402_1K6_1%_0.0625W_100PPM	0402
R151, R152 R159 > R161 R167, R168 R179 > R181 R282	11		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	1k1	GENERIC R0402_1K1_1%_0.0625W_100PPM	0402
R155 > R158 R166 R178 R186, R187	12		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	150	GENERIC R0402_150R_1%_0.0625W_100PPM	0402

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R196 > R198 R205						
R169, R182	2		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	5k6	GENERIC R0402_5K6_1%_0.0625W_100PPM	0402
R194, R195	2		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	2k4	GENERIC R0402_2K4_1%_0.0625W_100PPM	0402
R216	1		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	910	GENERIC R0402_910R_1%_0.0625W_100PPM	0402
R284	1		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	2k37	GENERIC R0603_2K37_0.1%_0.063W_10PPM	0603
R285	1		±0.1% 0.063W ±10ppm Thin Film Chip Resistor	6k98	GENERIC R0603_6K98_0.1%_0.063W_10PPM	0603
C1 C5 > C7 C11, C12 C17, C18 C20, C21 C23 > C25 C44 C48 > C50 C57 > C63 C65 > C69 C73 C84, C85 C89	33		±20% 6.3V X5R SMD Multilayer Chip Ceramic Capacitor	100uF	GENERIC CC1210_100UF_6.3V_20%_X5R	1210
C2 C8, C9 C36 C86 C88 C90 C92	8		±20% 6.3V X5R SMD Multilayer Chip Ceramic Capacitor	22uF	GENERIC CC0805_22UF_6.3V_20%_X5R	0805
C3 C10 C94 C96 > C128 C130 C132 > C135 C137, C138 C153, C154 C163 > C165 C169, C170 C183 > C187 C206 C209 C211, C212 C214 C224 > C228 C235 C238 C240 C242 C245, C246 C253, C254 C264, C265 C271 > C279 C286, C287 C292 > C298 C301, C302 C305 > C307 C310 C313 > C358 C374 > C376 C378 C384 C387 C389, C390 C392 C405, C406 C436, C437 C447 C457	201		±10% 16V X7R SMD Multilayer Chip Ceramic Capacitor	100nF	GENERIC CC0402_100NF_16V_10%_X7R	0402

Ref	Qty	Scem	Description	Val&Device	Manufacturer P/N	Case
C464, C465 C484 > C522						
C4 C131 C139, C140 C145, C146 C149 C151, C152 C159, C160 C162 C166 C171 > C173 C175 > C177 C181, C182 C191 > C193 C195 > C203 C205 C208 C210 C215 C217 > C223 C229 C232 > C234 C239 C247 C251 C257 C263 C266, C267 C270 C284 C288 > C291 C360 C362 C366 C369 C372, C373 C377 C381 C385 C391 C393, C394 C397 C399, C400 C404 C409 > C418 C423 > C432 C435 C438 C441 > C443 C446 C458 C463 C466 > C469 C472 C475 C478 C481 > C483	115		±20% 4V X5R SMD Multilayer Chip Ceramic Capacitor	4.7uF	GENERIC CC0402_4.7UF_4V_20%_X5R	0402
C13 > C16 C19 C22 C26 > C35 C37 > C40	20		±5% 50V NP0 SMD Multilayer Chip Ceramic Capacitor	100pF	GENERIC CC0402_100PF_50V_5%_NP0	0402
C41 C45 C64 C70	4		±10% 10V Solid Tantalum Chip Capacitor	330uF	GENERIC CTE7343-31_330UF_10V_10%	D

Ref	Qty	Scem	Description	Val&Device	Manufacturer P/N	Case
C42, C43 C46, C47 C75 > C83	13		±10% 6.3V Solid Tantalum Chip Capacitor	470uF	GENERIC CTE7343-31_470UF_6.3V_10%	D
C51, C52 C54, C55 C71 C74 C87 C91 C129 C136 C213 C241	12		±10% 16V X5R SMD Multilayer Chip Ceramic Capacitor	10uF	GENERIC CC0805_10UF_16V_10%_X5R	0805
C53 C56 C72 C93	4		±20% 16V Low ESR 0R056, Radial Lead, Aluminum Electrolytic Capacitor, (FR Serie, Type A)	470uF	PANASONIC EEUFR1C471	LS3.5 D8.5 x H13
C95	1		±10% 16V X7R SMD Multilayer Chip Ceramic Capacitor	33nF	GENERIC CC0402_33NF_16V_10%_X7R	0402
C141 C148 C155, C156 C167, C168 C174 C178 > C180 C188 > C190 C194 C204 C207 C216 C230, C231 C236, C237 C248 > C250 C252 C258 C260 > C262 C359 C363 C371 C380 C383 C386 C388 C395, C396 C398 C401 > C403 C407, C408 C419 > C422 C433, C434 C439, C440 C444, C445 C448 > C456 C459, C460 C462 C480	67		±10% 6.3V X5R SMD Multilayer Chip Ceramic Capacitor	470nF	GENERIC CC0402_470NF_6.3V_10%_X5R	0402
C142 > C144 C147 C150 C157, C158 C161 C255 C259 C268, C269 C280 > C283 C285 C308 C311 C361	35		±10% 6.3V X5R SMD Multilayer Chip Ceramic Capacitor	220nF	GENERIC CC0402_220NF_6.3V_10%_X5R	0402

Ref	Qty	Scem	Description	Val&Device	Manufacturer P/N	Case
C364, C365 C367, C368 C370 C379 C382 C461 C470, C471 C473, C474 C476, C477 C479						
C243 C299 C303	3		±10% 16V X7R SMD Multilayer Chip Ceramic Capacitor	22nF	GENERIC CC0402_22NF_16V_10%_X7R	0402
C244 C300 C304	3		±5% 50V NP0 SMD Multilayer Chip Ceramic Capacitor	220pF	GENERIC CC0402_220PF_50V_5%_NP0	0402
C256 C309 C312	3		±10% 50V X7R SMD Multilayer Chip Ceramic Capacitor	1nF	GENERIC CC0402_1NF_50V_10%_X7R	0402
L1, L2	2		±20% 360mA Wire Wound Chip Inductors	4.7uH	KEMET L0805C4R7MDWIT	0805
L3 > L6	4		±5% 250mA SMT Inductors SIMID Series	1uH	EPCOS B82498B1102J	0805
IC1 IC25 > IC27 IC43	5		Single Output LDO, 3.0A, Adj.(0.8 to 3.3V), Fast Transient Response, Programmable SoftStart	TPS74401RGWT	TEXAS INSTRUMENTS TPS74401RGWT	QFN20
IC2 IC5 IC7 IC9 IC15, IC16 IC21, IC22 IC28, IC29 IC31 > IC33 IC35 IC42	15		8-Bit Universal Bus Transceiver and Two 1-Bit Bus Transceivers with 3-State Outputs	SN74VMEH22501DGGR	TEXAS INSTRUMENTS SN74VMEH22501DGGR	TSSOP48
IC3	1		1 GSPS, 14-Bit, 3.3 V CMOS Direct Digital Synthesizer	AD9910BSVZ	ANALOG DEVICES AD9910BSVZ	QFP100
IC4	1		3.3V Sink/Source DDR Termination Regulator	TPS51200DRCT	TEXAS INSTRUMENTS TPS51200DRCT	SON10
IC6 IC12 IC17, IC18	4		14-Output Clock Generator with Integrated 1.6 GHz VCO	AD9516-4BCPZ	ANALOG DEVICES AD9516-4BCPZ	QFN64
IC8	1		16 Meg x 16 x 8 Banks DDR3 SDRAM, +1.5V Supply	MT41J128M16HA-15E	MICRON TECHNOLOGY MT41J128M16HA-15E	BGA96
IC10, IC34	2		SPARTAN-6, FPGA, 396 User I/Os, 8 GTPs, 676-Ball BGA, Commercial Grade, Pb-Free	XC6SLX150T-2FGG676C	XILINX XC6SLX150T-2FGG676C	BGA676
IC11	1		Quad, 16-Bit DAC with 1.25V 5ppm/°C On-Chip Reference	AD5666BRUZ-1	ANALOG DEVICES AD5666BRUZ-1	TSSOP14
IC13	1		Programmable Resolution 1-Wire Digital Thermometer (-55°C to +125°C)	DS18B20U+	DALLAS MAXIM DS18B20U+	uSOP8
IC14	1		2.7 V to 5.25 V, Micro Power, 8-Channel, 125 kSPS, 12-Bit ADC	AD7888AR	ANALOG DEVICES AD7888AR	SOIC16
IC19, IC20	2		128 Mbit (Multilevel), Low-Voltage, Serial Flash Memory With 50-MHz SPI Bus Interface	M25P128-VMF6G	NUMONYX M25P128-VMF6G	
IC23	1		High-Speed Differential Line Drivers And Receivers	SN65LVDM051D	TEXAS INSTRUMENTS SN65LVDM051D	SOIC16
IC24 IC39 > IC41	4		6A, 2.2V to 5.5V Input, Non-Isolated, 0.69 to 3.6V Output, Adjustable Power Modue With TurboTrans™	PTH04T230WAZ	TEXAS INSTRUMENTS PTH04T230WAZ	
IC30	1		3.3V to -2V, Iout (max) 5A, 10 Watt Plus to Minus Voltage Converter	PT6914C	TEXAS INSTRUMENTS PT6914C	
IC36, IC37	2		72-Mbit (2M x 36) Pipelined 3.3VSRAM with NoBL Architecture	CY7C1470BV33-167BZXC	CYPRESS CY7C1470BV33-167BZXC	BGA165
IC38	1		3.3V to -5.2V, Iout (max) 2.5A, 12 Watt Plus to Minus Voltage Converter	PT6915C	TEXAS INSTRUMENTS PT6915C	
IC44	1		10k, 10-Bit, Nonvolatile Linear-Taper Digital Potentiometer	MAX5483EUD+	MAXIM MAX5483EUD+	TSSOP 14
LD1 > LD23	23		Low current chip LED SML-311 Serie		ROHM SML-311UTT86K	
LD24, LD25	2		Quad-Level 2mm HE Red, PCB Edge Mounting		BIVAR H485CHDL	
OSC1	1		10-280MHz 3.3V ±20ppm LVDS Any-Rate I2C Programmable XO Oscillator Si570 Serie	10-280MHz	SILICON LABS 570BBC000121DG	
OSC2	1		11pF 3.3V ±1ppm Surface Mount TCXO Voltage Controlled Oscillator (CFPT-125 Serie)	25MHz	RAKON IVT3205CR 25.0 MHz	
T1 > T8	8		50V 200mA N-Channel Enhancement Mode Field-Effect Transistor	B5H103	NXP SEMICONDUCTORS B5H103	SOT23-3
CageBot1, CageBot2	2		Cage bottom For Single Port SFP (Small Form-factor Pluggable)		TYCO ELECTRONICS TYCO_6367034-1	
CageTop1, CageTop2	2		Cage Top For Single Port SFP (Small Form-factor Pluggable)		TYCO ELECTRONICS TYCO_6367035-1	
J1	1		2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, 14 Circuits, with Locking Windows and Centre Polarization Slot, PCB Locator		MOLEX 87832-1420	
J2, J4	2		20 Position, Pitch 0.8mm SFP Receptacle (Small Form-factor Pluggable)		TYCO ELECTRONICS 1367073-1	
J3, J8	2		Up to 6GHz Ultra Small Surface Mount Male Coaxial Connectors U.FL Series		HIROSE (HRS) U.FL-R-SMT-1(10)	
J6, J7	2	09.46.11.188.8	Size 00, Low Profile Dual 50 Ohms Coaxial Elbow Sockets (90°)		LEMO EPY.00.250.NTNY	
J9, J10	2		400 contacts (10 rows abcdefghj) Surface Mount Female Connector, VITA 57		SAMTEC ASP-134486-01	
P1, P3	2		DIN 41612, har-bus 64, 160 poles,5 Rows z+a+b+c+d, Angled solder pins, Male contacts, Pitch 2.54mm		HARTING 02 01 160 2101	

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P2	1		Type B19, 95 Contacts (abcde) Female Connector, Angled, HAR-BUS HM with Pre-installed Upper Shield (f), Pitch 2mm		HARTING 17 25 095 2102	
SW2, SW4	2	09.55.10.960.9	Closed Insulated Black Jumper Pitch 2.54mm		KONTEK COMATEL 313.1730.0.00.40.0	
SW3	3	07.88.24.516.1	Male Jumper Pitch 10.16mm		KONTEK COMATEL 313.0004.0.00.500	
SW5, SW6						
W1 > W6	1(6)	09.55.10.708.9	1 Out of 8 Contacts of Straight Strip Header Pitch 2.54mm L=6.3mm "Mini-Wire-Wrap"		KONTEK COMATEL 386.0358.1.08.440	
F1 > F9 F11 F13 > F15	13		Thin Film Chip Fuse	2.5A-24V	BOURNS SF-0603F250-2	
F10, F12	2		Thin Film Chip Fuse	3A-24V	BOURNS SF-0603F300-2	
PB1	1		12VDC 50mA SPST Tactile Push-Button Switch		TYCO ALCOSWITCH FSM2JSMA or 2-1437565-7	
SW1	1		8 Way SPST SMD DIP Switch, Latched, Contact Rating 0.025A 24VDC		TYCO 1-1571983-0 or GDH08S04	
<b>Not Mounted</b>						
R139, R140 R142, R143 R147, R148 R153, R154	8		±1% 0.1W ±100ppm/°C General Purpose Thick Film Chip Resistor	4k7	GENERIC R0603_4K7_1%_0.1W_100PPM	0603
R199	1		±1% 0.0625W ±100ppm/°C General Purpose Thick Film Chip Resistor	100	GENERIC R0402_100R_1%_0.0625W_100PPM	0402
R220 > R223 R225, R226 R232 R234 R236, R237 R243 > R250 R254 > R261 R264 > R273 R278 R280, R281 R287	40		1A (0.05R Max DC Resistance) Zero Ohm Jumper	0	GENERIC R0603_0R_JUMPER	0603
J5	1		Right-Angle, Upright Plug, Through-Hole External Serial ATA Plug (eSATA)		FCI 10074141-001LF	
<b>Accessories</b>						
(P1, P2)	4		Ms bl Tubular Rivet L=9mm D1=2.5mm D2=4mm S=0.3		VOGT A25090030.60	
Dimension : 160 x 233.3 mm				Through pins: SMD pins on TOP: SMD pins on BOTTOM: Total nb of pins:		546 4446 1359 6351