B001AA PCIe MCU Module

ABMM2

ATMEGA2650
16AU 1338

USB

MEGA328P
AU 1343

MCU

FOTA

50.95mm

47.75mm

30.00mm

24.20mm

J3

PZ1

ATMEL

ATMEGA2650
16AU 1338

TP7 TP9 TP12

TP8 TP10 TP11

ABMM2

SW1

U13

5.24mm

4.83mm

Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.01mm	Solder Resist	Solder Mask	GTS
Copper	**Top Layer**	**0.04mm**		**Signal**	**GTL**
Prepreg		*0.10mm*	*2313*	*Dielectric*	
Copper	**Mid Layer 1**	**0.02mm**		**Signal**	**G1**
Core		*0.57mm*	*FR-4*	*Dielectric*	
Copper	**Mid Layer 2**	**0.02mm**		**Signal**	**G2**
Prepreg		*0.13mm*	*2116*	*Dielectric*	
Copper	**Mid Layer 3**	**0.02mm**		**Signal**	**G3**
Core		*0.57mm*	*FR-4*	*Dielectric*	
Copper	**Mid Layer 4**	**0.02mm**		**Signal**	**G4**
Prepreg		*0.10mm*	*2313*	*Dielectric*	
Copper	**Bottom Layer**	**0.04mm**		**Signal**	**GBL**
Surface Material	Bottom Solder	0.01mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.62mm

Bill Of Materials

Line #	Designator	Comment	Quantity
	R16, R37, R38	0R - 0402 - %1 - 1/16W	3
	R60	1M05 - 0402 - %1 - 1/16W	1
	R5, R6, R7, R29, R30, R31	4K7 - 0402 - %1 - 1/16W	6
	U1	8-bit MicroController	1
	R1, R18, R19, R20, R21, R35, R41, R42, R50, R51, R53, R54, R55, R56, R59	10K - 0402 - %1 - 1/16W	15
	R39, R40	33R - 0402 - %1 - 1/16W	2
	R8, R9, R10, R13, R14, R15, R17, R22, R23, R24, R25, R32, R33, R34, R43, R44, R45, R49, R57, R58, R61, R63	47K - 0402 - %1 - 1/16W	22
	R12	249K - 0402 - %1 - 1/16W	1
	R2, R3, R4, R11, R26, R27, R28, R36, R62	330R - 0402 - %1 - 1/16W	9
	D4, D5, D6, D7, D8, D9	0402ESDA-MLP1	6
	J3	105450-0101	1
	D1, D2	150066M153000	2
	J2	5025700893	1
	X1	ABMM2-7.3728MHZ-E2-T	1
	U6	ATMEGA2560V-8AU	1
	Q1, Q2, Q3, Q4, Q5, Q6	BC847AQAZ	6
	C80, C81	Capacitor - 1nF [0402] (Ceramic)	2
	C37	Capacitor - 10uF [0603] (Tantalum)	1
	C53, C54	Capacitor - 13pF [0402] (Ceramic)	2
	C5, C6, C7, C10, C11, C14, C16, C18, C21, C22, C23, C26, C27, C28, C31, C32, C33, C34, C35, C36, C41, C45, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C75, C76, C77, C78, C79, C82, C83, C84, C85, C86, C87, C89	Capacitor - 33pF [0402] (Ceramic)	54
	C1, C2, C3, C4, C8, C9, C12, C13, C15, C17, C19, C29, C30, C38, C39, C40, C43, C44, C46, C47, C48, C49, C50, C51, C52, C88	Capacitor - 100nF [0402] (Ceramic)	26
	C20, C24, C25	Capacitor - 100nF [0402] (Ceramic)	3
	U11	DS28CM00R-A00+T	1
	U8	FT234XD-R	1
	U12	HDC2010YPAR	1
	U7	PAM8904EGPR	1
	PZ1	PKMCS0909E4000-R1	1
	U3, U13	Power Switch	2
	SW1	PTS526SK08SMTR2LFS	1
	U10	RV-3028-C7 32.768KHZ 1PPM TA QC	1
	D3	SMD LED (Green)	1
	U5	SN3257QPWRQ1	1
	D10	SS3P3-M3/84A	1
	U9	TCA9548APWR	1
	U2	TPL5111DDCR	1
	U4	TXS0108EPWR	1