



C2Me24MPA

2.4GHz Bluetooth 4.0 Low Energy Module

General Description

C2Me24M module is a low energy (Bluetooth Low Energy BLE), low cost, and high performance Bluetooth 4.0 wireless transceiver module based on TI CC2541 Single-Chip solution that has the *C2Me* decryption algorithm build in.

The module is designed to work specifically with mobile APP base on the application as of below

Applications

1. Lighting color temperature control
2. Lighting Dimming Control
3. Lighting ON/OFF
4. Power Switch ON/OFF
5. Digital door Lock
6. Window blind



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Features

RF

- Operating Frequency: **2402MH, 2426MHz, 2480MHz**
- Supply Voltage: 2Vdc – 3.6Vdc
- 2.4-GHz Bluetooth low energy technology Compliant

GPIO

- PWM x 4
- Low Power Consumption: ~ 20mA

Pin Description General Configuration (I: input; O: output; I/O: input/output P: Power)

Pin No.	Pin Type	I/O	Function Description	Notes
1,2,3,4,5	NA		No Connection	
6	GND	P	GND	
7	PWM/GPIO	O	PWM/output channel 1	
8	3.3Vdc	P	Power Input 2Vdc to 3.6Vdc	
9	PWM/GPIO	O	PWM/output channel 2	
10	PWM/GPIO	O	PWM/output channel 3	
11,12,13,14,15	NA		No Connection	
16	UART	O	TX	Use for Production in identifying ID
17,18,19	NA		No Connection	
20	PWM/GPIO	O	PWM/output channel 4	
21	NA		No Connection	
22	GND	P	GND	
23	GND	P	GND	

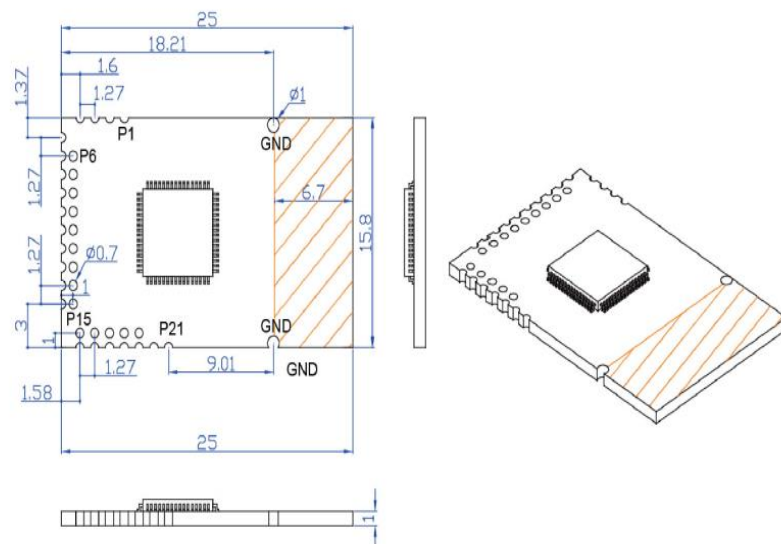


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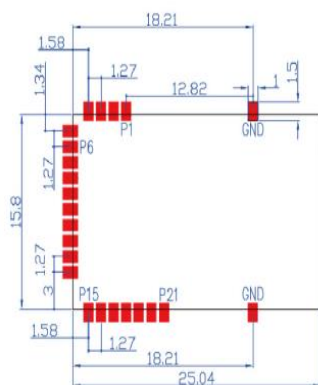
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Module Mechanical Data

➤ C2Me24MPA : 15.8mm x 25mm



C2Me24M PA Layout footprint





C2Me24MPA

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Ordering Information:

Part No.	Package	Units	Notes
C2Me24M PA - <i>Code</i>	1 tray	24	PCB/Patch Antenna

Packaging

Items	Description	L x W x H (cm)	Quantity	Picture
1	Tray	24.5 x 14.6 x 0.8	24 pcs/ Tray ~65 (g)	
2	Inner Box	24.8 x 15.3 x 11.0	360pcs/Box ~960 (g)	
3	Carton	52 x 33.5 x 38	4320pcs/Carton ~12.2 (Kg)	



Reference Design for 3V system





REFERENCE DESIGN FOR 5V SYSTEM

The diagram illustrates a reference design for a 5V system. It includes a DC-DC converter (Q1) converting DC5V to DC3V3, a microcontroller (C2Me24MPA) with various pins connected to GND and power, and a USB module (UB) connected to the microcontroller. The design also shows a target board (J5) connected to the microcontroller and a USB module (J4) connected to the target board. The components are labeled with their part numbers and values, and the connections are color-coded.

DC-DC Converter (Q1): Converts DC5V to DC3V3. Components include C5 (100nF), C6 (100nF), C7 (100uF/25V), and R1 (300RNF).

Microcontroller (C2Me24MPA): Features include P1_4, P1_5, P1_6, P1_7, P1_8, P1_9, P1_10, P1_11, P1_12, P1_13, P1_14, P1_15, P1_16, P1_17, P1_18, P1_19, P1_20, P1_21, P1_22, P1_23, P1_24, P1_25, P1_26, P1_27, P1_28, P1_29, P1_30, P1_31, P1_32, P1_33, P1_34, P1_35, P1_36, P1_37, P1_38, P1_39, P1_40, P1_41, P1_42, P1_43, P1_44, P1_45, P1_46, P1_47, P1_48, P1_49, P1_50, P1_51, P1_52, P1_53, P1_54, P1_55, P1_56, P1_57, P1_58, P1_59, P1_60, P1_61, P1_62, P1_63, P1_64, P1_65, P1_66, P1_67, P1_68, P1_69, P1_70, P1_71, P1_72, P1_73, P1_74, P1_75, P1_76, P1_77, P1_78, P1_79, P1_80, P1_81, P1_82, P1_83, P1_84, P1_85, P1_86, P1_87, P1_88, P1_89, P1_90, P1_91, P1_92, P1_93, P1_94, P1_95, P1_96, P1_97, P1_98, P1_99, P1_100, P1_101, P1_102, P1_103, P1_104, P1_105, P1_106, P1_107, P1_108, P1_109, P1_110, P1_111, P1_112, P1_113, P1_114, P1_115, P1_116, P1_117, P1_118, P1_119, P1_120, P1_121, P1_122, P1_123, P1_124, P1_125, P1_126, P1_127, P1_128, P1_129, P1_130, P1_131, P1_132, P1_133, P1_134, P1_135, P1_136, P1_137, P1_138, P1_139, P1_140, P1_141, P1_142, P1_143, P1_144, P1_145, P1_146, P1_147, P1_148, P1_149, P1_150, P1_151, P1_152, P1_153, P1_154, P1_155, P1_156, P1_157, P1_158, P1_159, P1_160, P1_161, P1_162, P1_163, P1_164, P1_165, P1_166, P1_167, P1_168, P1_169, P1_170, P1_171, P1_172, P1_173, P1_174, P1_175, P1_176, P1_177, P1_178, P1_179, P1_180, P1_181, P1_182, P1_183, P1_184, P1_185, P1_186, P1_187, P1_188, P1_189, P1_190, P1_191, P1_192, P1_193, P1_194, P1_195, P1_196, P1_197, P1_198, P1_199, P1_200, P1_201, P1_202, P1_203, P1_204, P1_205, P1_206, P1_207, P1_208, P1_209, P1_210, P1_211, P1_212, P1_213, P1_214, P1_215, P1_216, P1_217, P1_218, P1_219, P1_220, P1_221, P1_222, P1_223, P1_224, P1_225, P1_226, P1_227, P1_228, P1_229, P1_230, P1_231, P1_232, P1_233, P1_234, P1_235, P1_236, P1_237, P1_238, P1_239, P1_240, P1_241, P1_242, P1_243, P1_244, P1_245, P1_246, P1_247, P1_248, P1_249, P1_250, P1_251, P1_252, P1_253, P1_254, P1_255, P1_256, P1_257, P1_258, P1_259, P1_260, P1_261, P1_262, P1_263, P1_264, P1_265, P1_266, P1_267, P1_268, P1_269, P1_270, P1_271, P1_272, P1_273, P1_274, P1_275, P1_276, P1_277, P1_278, P1_279, P1_280, P1_281, P1_282, P1_283, P1_284, P1_285, P1_286, P1_287, P1_288, P1_289, P1_290, P1_291, P1_292, P1_293, P1_294, P1_295, P1_296, P1_297, P1_298, P1_299, P1_300, P1_301, P1_302, P1_303, P1_304, P1_305, P1_306, P1_307, P1_308, P1_309, P1_310, P1_311, P1_312, P1_313, P1_314, P1_315, P1_316, P1_317, P1_318, P1_319, P1_320, P1_321, P1_322, P1_323, P1_324, P1_325, P1_326, P1_327, P1_328, P1_329, P1_330, P1_331, P1_332, P1_333, P1_334, P1_335, P1_336, P1_337, P1_338, P1_339, P1_340, P1_341, P1_342, P1_343, P1_344, P1_345, P1_346, P1_347, P1_348, P1_349, P1_350, P1_351, P1_352, P1_353, P1_354, P1_355, P1_356, P1_357, P1_358, P1_359, P1_360, P1_361, P1_362, P1_363, P1_364, P1_365, P1_366, P1_367, P1_368, P1_369, P1_370, P1_371, P1_372, P1_373, P1_374, P1_375, P1_376, P1_377, P1_378, P1_379, P1_380, P1_381, P1_382, P1_383, P1_384, P1_385, P1_386, P1_387, P1_388, P1_389, P1_390, P1_391, P1_392, P1_393, P1_394, P1_395, P1_396, P1_397, P1_398, P1_399, P1_400, P1_401, P1_402, P1_403, P1_404, P1_405, P1_406, P1_407, P1_408, P1_409, P1_410, P1_411, P1_412, P1_413, P1_414, P1_415, P1_416, P1_417, P1_418, P1_419, P1_420, P1_421, P1_422, P1_423, P1_424, P1_425, P1_426, P1_427, P1_428, P1_429, P1_430, P1_431, P1_432, P1_433, P1_434, P1_435, P1_436, P1_437, P1_438, P1_439, P1_440, P1_441, P1_442, P1_443, P1_444, P1_445, P1_446, P1_447, P1_448, P1_449, P1_450, P1_451, P1_452, P1_453, P1_454, P1_455, P1_456, P1_457, P1_458, P1_459, P1_460, P1_461, P1_462, P1_463, P1_464, P1_465, P1_466, P1_467, P1_468, P1_469, P1_470, P1_471, P1_472, P1_473, P1_474, P1_475, P1_476, P1_477, P1_478, P1_479, P1_480, P1_481, P1_482, P1_483, P1_484, P1_485, P1_486, P1_487, P1_488, P1_489, P1_490, P1_491, P1_492, P1_493, P1_494, P1_495, P1_496, P1_497, P1_498, P1_499, P1_500, P1_501, P1_502, P1_503, P1_504, P1_505, P1_506, P1_507, P1_508, P1_509, P1_510, P1_511, P1_512, P1_513, P1_514, P1_515, P1_516, P1_517, P1_518, P1_519, P1_520, P1_521, P1_522, P1_523, P1_524, P1_525, P1_526, P1_527, P1_528, P1_529, P1_530, P1_531, P1_532, P1_533, P1_534, P1_535, P1_536, P1_537, P1_538, P1_539, P1_540, P1_541, P1_542, P1_543, P1_544, P1_545, P1_546, P1_547, P1_548, P1_549, P1_550, P1_551, P1_552, P1_553, P1_554, P1_555, P1_556, P1_557, P1_558, P1_559, P1_560, P1_561, P1_562, P1_563, P1_564, P1_



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