

synergy-cart rev005

Qty	Parts	Value	Package	Part num / Description
1	R6	0R	R0603	
1	R19	1k	R0603	
10	R1, R2, R3, R4, R5, R7, R8, R45, R47, R48	10K	R0603	
1	R10	100k	R0603	
1	R9	5k	RTRIM4G/J	TS53YJ502MR10 (or similar)
2	C26, C29	18pF	C0603	
1	C20	10n	C0603	
9	C2, C5, C7, C18, C30, C32, C33, C35, C58	100n	C0603	
1	C8	1uf	C0603	
2	C22, C24	2.2uf	C0805	
2	C1, C6	10uf	CT3216	CA45-106K016AT (16V) Tantalum
1	IC7	REG1117	SOT223	AMS1117-3.3 (or similar)
1	UC1	STM32F405RGT6	TQFP-10X10-64	STM32F405RGT6
1	CN1		SDCARD_SMT_AMPH_160611	Amphenol 1010031336802 (or similar - check footprint)
1	X1	52746-16	52746-16	FPC Connector ZIF for SMT 0.5mm contacts bottom / AFC07-S16FCC-00 (or similar))
1	Y1	8Mhz	CRYSTAL-SMD-5.0MM-3.2MM-2	7A-8.00MAAJ-T (or similar)
1	BANK_SEL	SWITCH-MOMENTARY-2PTH	TACTILE-PTH	NOT NEEDED (TL1105SPF250Q)
1	LED		CHIPLED_1206	NOT NEEDED (debug)
1	J3	M05_NOSILK_1SQ	M05_NOSILK_1SQ	NOT NEEDED (programming header)
1	RST	T1107A-6_3.8_2.5	SW-TAKT_6X3.5_SMD	NOT NEEDED (reset switch)
1	PWR		1X02	NOT NEEDED (alt power source for programming)
1	G-T-R		1X03	NOT NEEDED (Debug serial port)
1	SYNERGYCART	SYNERGY_CARTSYNER	SYNERGY_CART	NOT NEEDED (PCB layout)

All caps at least 10v Ceramic unless specced. All resistors 1% at least 0.1 watt

Also needs display - [buydisplay.com](http://buydisplay.com) ERM801FS-1 , button cap Sifam PB04/51/000, printed case, m3 threaded insert, screw, sticker (ALL NOT NEEDED for pcb cart)