



Title		
Size	Number	Revision
A2		
Date:	2024/04/04	1 Sheet of 1
File:	D:\Alumni_Sheet_S-050x	Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
AMS1117-3.3V	Dán	AMS1	SOT223	AMS1117 SMD	1
Nut Nhan 4 Chan Cam 6x6	Nut Nhan 4 Chan 6x6mm	BT1	Nut Nhan 4 Chan Cam 6x6	Nut Nhan 4 Chan Cam 6x6	1
104	Cảm	C1, C2, C3, C4, C5, C9, C14	tu gom	Tu gom 104 50V	7
22pF	Cảm	C6, C7	tu gom	Tu gom 22pF 50V	2
1uF	Cảm	C8	tu tantalum dip5.08	Tu tantalum 1uF DIP5.08	1
Header2	Header IDC, 2 x1 Pin Vertical 2.54mm Pitch (Non-Boxed, Male)	C10	HDR2	Header2	1
10uF	Cảm	C12, C13	tu hoa 4mm	Tu Hoa 10uF 25V 4x7	2
100v	Cảm	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10, D11, D12, D13, D14	DIODE1A	Diode 1N4007	14
Header 4P 2.54 Duc Thang	Cảm	H1	XH2.54M-4	Header 4P 2.54 Duc Thang	1
Domino	Domino	K1, K2, K3, K4, K5, K6, K7, K8, K9, K10, K11, K12, K13, K14, K15	KF128HL_2P	KF128HL_2P	15
Domino_3	Domino 3	KF1	DOMINO_3	Domino_3	1
LED 3mm	Cảm	L1, L4, L5, L6, L7, L8, L9, L10, L11, L12, L13, L14, L15, L16, L17, L18, L19, L20, L21, L22, L23, L24, L25, L26, L27, L28, L29, L30	LED-3MM-GREEN	LED 3mm Xanh La	28
LED 3mm	Cảm	L2, L3	LED-3MM-RED	LED 3mm Do	2
2SA1020	PNP 600mW, ECB	Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, Q9, Q10, Q11, Q12, Q13, Q14	TO92-123	2SA1015	14
470R	Cảm	R1, R18, R20, R32, R34, R36, R47, R49, R59, R61, R75, R77, R87, R89	tro vach 1/4w	Tro Vach 1/4W 5% 470R	14
10k	Cảm, Cảm	R2, R7, R8, R11, R12, R19, R21, R33, R35, R37, R48, R50, R60, R62, R76, R78, R88, R90	tro vach 1/4w	Tro Vach 1/4W 5% 10k, Tro Vach 1/4W 1% 10k	18
1k	Cảm	R3, R9, R10, R14, R25, R26, R41, R42, R53, R54, R63, R64, R69, R70, R81, R82	tro vach 1/4w	Tro Vach 1/4W 5% 1k	16
100k	Dán	R4	tro smd 0805	Tro 0805 1% 10k	1
10k	Dán	R5, R6	tro smd 0805	Tro 0805 1% 10k	2
100k	Cảm	R13, R15, R27, R28, R31, R45, R46, R57, R58, R71, R72, R85, R86	tro vach 1/4w	Tro Vach 1/4W 5% 100k	13
1.8k	Cảm	R16, R17, R29, R30, R43, R44, R55, R56, R65, R66, R73, R74, R83, R84	tro vach 1/4w	Tro Vach 1/4W 5% 1.8k	14
2.2k	Cảm	R22, R23, R24, R38, R39, R40, R51, R52, R67, R68, R79, R80, R91, R92	tro vach 1/4w	Tro Vach 1/4W 5% 2.2k	14
PC817	Single Opto	U1, U2, U4, U5, U6, U7, U8, U9, U10, U11, U12, U13, U14, U15, U16, U17, U18, U19, U20, U21, U22, U23, U24, U25, U26, U27, U28, U29	DIP4	PC817	28
STM32F103C8T6	ARM®Cortex®M3 STM32F1 Microcontroller IC 32-Bit 72MHz 64KB (64Kx8) FLASH-LQFP (7x7)	U3	LQFP-48_19.6_393_58x11_SMD	IC_STM32F103C8T6	1
8Mhz	Crystal For all Crystal 2pin.	Y1	Thach Anh 2 chan cam	Thach Anh 2 chan Cam	1