











CAP CER 1000GPF   100V XTR 0603	Comment	Description	Designator	Footprint	LibRef	Quantity
CAP CER 1000GPF						
2.2 LE 100V XTR 0603 C 3, C4, C5 C 6, C7, C8, C9, C10, C11, C12, C13, C14, C15, C16, C17, C19, C17, C12, C13, C14, C15, C16, C17, C19, C17, C17, C17, C17, C17, C17, C17, C17	22p		C1, C2	0603C	Cap1	2
Co. C7, C8, C9, C10, C11, C12, C13, C14, C13, C14, C13, C14, C14, C14, C14, C15, C16, C17, C19, C16, C17, C19, C21, C22, C23, C24, C36, C36, C36, C36, C36, C36, C36, C36	2 2015		C2 C4 CE	04020	Con1	2
C11, C12, C13, C14, C15, C17, C19, C17, C10, C17, C19, C17, C20, C23, C24, C25, C26, C28, C30, C26, C28, C30, C28, C30, C28, C30, C28, C30, C30, C30, C30, C30, C30, C30, C30	Z.ZUF	100V A/K 0003		00030	cap i	3
CAP CER 10000P CAP CER 10000P COPY CR 0603. CAP CER 10000P CAP CER 10000P CAP CER 10000P COPY CR 0603. CAP CER 10000P CAP CER 10000P CAP CER 10000P COPY CR 0603. CAP CER 10000P CAP CER 1						
100						
O. LUE		CAP CER 10000PF	C21, C22, C23, C24,			
CAP TANT 10UF 10V   C18, C20, C27   1206T   Cap2   3   Political Capacitor   Radial)   C29, C31, C32, C35   C. SMD(6.3x6.3)   Cap Pol1   4   CONZOVP2R54   Circuit Breaker   Circuit Breaker   Circuit Breaker   C1, C18, C29, C31, C32, C35   C. SMD(6.3x6.3)   Cap Pol1   4   CONZOVP2R54   Circuit Breaker   C1, C18, C29, C31, C32, C35   C. SMD(6.3x6.3)   Cap Pol1   4   CONZOVP2R54   Circuit Breaker   C2   Typical INFRARED   D1, D2, D3   0603D   LEDO   3   C10   C2, V   C10   C10   C10   C2, V   C10   C2, V   C10   C2, V   C10   C10   C2, V   C10   C2, V   C10   C10   C10   C2, V   C10   C10   C10   C2, V   C10		100V X7R 0603,	C25, C26, C28, C30,			
1096   1096   1296   1296   1296   1296   1296   1296   1297   1296	0.1uF		C32, C34, C36	0603C	Cap1, Cap	24
Polarized Capacitor   Radial)   C29, C31, C33, C35   C_SMD(6.3x5.3)   Cap Pol1   4	10. F		010 000 007	100/T	00	
Company   Comp	TOUF		C18, C20, C27	12061	Cap2	3
Circuit Breaker	100uF	1	C29 C31 C33 C35	C. SMD(6.3x5.3)	Cap Pol1	4
Typical INFRARED   Casa LED   D1, D2, D3   6603D   LED0   3   3   5   5   5   5   5   5   5   5	1004.	(rtadial)	0277 0017 0007 000		54p 1 511	
LEDO	Circuit Breaker	Circuit Breaker	CB1, CB2	1X2TM	Circuit Breaker	2
DC_SV   DCO095   DC1   DC_POWER   DC_SV   1		Typical INFRARED				
1.00   1.00	LED0					
SWD		DC005			_	
USART1		Hooder 4 Din				
UART14						
ESP8266 Module  Header, 6-Pin  BNC Elbow  P5, P6, P7, P10, P11, SMA-KE  SMA  Connector  P12  SMA-KE  BNC  6  P64302  Header, 7-Pin, Dual  CONZOVP2R54- Header 4  2  Header, 7-Pin, Dual  CONZOVP2R54- P13  AD9959  FOW  Header, 7-Pin, Dual  CONZOVP2R54- P13  ANHAC472  Header, 8-Pin, Right  Header 8H  Header, 8-Pin, Right  Header, 8-Pin, P15, P16  HE25-4-7P  Header 8H  Header 5  1  DLED SPI  Header, 5-Pin  P17  SHL_5  Header 5  1  DLED SPI  Header, 7-Pin  P19  OLED_0.96_SPI  Header 7  1  Header 7  1  Header 4  1  THOM UART LCD  Header, 7-Pin  P19  OLED_0.96_SPI  Header 7  1  Header 4  1  Header 4  1  THOM UART LCD  Header, 2-Pin  P20  Ah. 4  Header 7  Header 4  1  Header 2  Header 2  Header 2  Header 2-Pin  RES SMD IK OHM  NC  0.5% 1716W 0603  R1  RES SMD IK OHM  OR  0.5% 1716W 0603  R2, R3, R8, R9  0603R  Res1  3  RES SMD IK OHM  NC  0.5% 1716W 0603  R1,	UART4					
BNC Elbow   PS, P6, P7, P10, P11   SMA-KE   BNC   6				_		
SMA	ESP8266 Module		P4		Header 6	1
PE4302		BNC Elbow				
Header, 7-Pin, Dual row   P13   CON20VP2R54-	SMA					
AD9959   row	PE4302		P8, P9	_	Header 4	2
Header 8 H	ADOOEO		D12		Hooder 7V2	1
Header 8H   Angle	AD9959		P13	ZX / I IVI- I	Header 7X2	
HMC472 Header, 7-Pin P15, P16 XH2.54-7P Header 7 2 ADF4351 Header, 5-Pin P17 XH_5 Header 5 1 SPI2 Header, 5-Pin P18 XH_5 Header 5 1 OLED SPI Header, 7-Pin P19 OLED_0.96_SPI Header 7 1 HMI UART LCD Header, 4-Pin P20 Xh_4 Header 7 1 Header 2 Header, 2-Pin P21 KF2EDG_3R81_2P Header 2 1 Header 2 Header, 2-Pin P21 KF2EDG_3R81_2P Header 2 1 RES SMD 1K OHM OL.5% 1/16W 0603 R1 RES SMD 1K OHM OL.5% 1/16W 0603 R2, R3, R8, R9 0603R Res1 1  OLED SPI Header, 4-Pin P20 Xh_4 Header 4 1 RES SMD 1K OHM OL.5% 1/16W 0603 R1 RES SMD 1K OHM OL.5% 1/16W 0603 R2, R3, R8, R9 0603R Res1 1  OLED SPI HEADER SPIN OHM OL.5% 1/16W 0603 R4, R5, R6 0603R Res1 3 RES SMD 1K OHM OL.5% 1/16W 0603 R1, R1, R10, R11 0603R Res1 3 RES SMD 1K OHM OL.5% 1/16W 0603 R12, R17 0603R Res1 2 RES SMD 1K OHM OL.5% 1/16W 0603 R12, R17 0603R Res1 2 RES SMD 1K OHM OL.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 RES SMD 1K OHM OL.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 1 R16W R17	Header 8H		P14	XH 8	Header 8H	1
ADF4351 Header, 5-Pin P17 XH_5 Header 5 1 SPI2 Header, 5-Pin P18 XH_5 Header 5 1 SPI2 Header, 7-Pin P19 OLED_0.96_SPI Header 7 1 HMI UART LCD Header, 4-Pin P20 xh_4 Header 4 1 Header 2 Header, 2-Pin P21 KF2EDG_3R81_2P Header 2 1 RES SMD 1K OHM NC 0.5% 1/16W 0603 R1 0603R Res1 1  RES SMD 1K OHM O.5% 1/16W 0603 R2, R3, R8, R9 0603R Res1 1  RES SMD 1K OHM NC 0.5% 1/16W 0603 R4, R5, R6 0603R Res1 3  RES SMD 1K OHM NC 0.5% 1/16W 0603 R7, R10, R11 0603R Res1 3  RES SMD 1K OHM NC 0.5% 1/16W 0603 R7, R10, R11 0603R Res1 3  RES SMD 1K OHM NC 0.5% 1/16W 0603 R12, R17 0603R Res1 3  RES SMD 1K OHM NC 0.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 3  RES SMD 1K OHM NC 0.5% 1/16W 0603 R12, R17 0603R Res1 4  RES SMD 1K OHM NC 0.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 4  RES SMD 1K OHM NC 0.5% 1/16W 0603 R15, R16, R20, R21 NC 0.5% 1/16W 0603 R15, R20, R21 NC 0.5% 1/16W	HMC472	J -				2
DLED SPI   Header, 7-Pin   P19	ADF4351	Header, 5-Pin	P17		Header 5	1
HMI UART LCD Header, 4-Pin P20	SPI2			_		1
Header 2						
RES SMD 1K OHM 0.55% 1/16W 0603 RES SMD 1K OHM 0R 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k 10k 0.55% 1/16W 0603 RES SMD 1K OHM 10k				_		
NC 0.5% 1/16W 0603 R1 0603R Res1 1  RES SMD 1K OHM 0.5% 1/16W 0603 R2, R3, R8, R9 0603R Res1 4  RES SMD 1K OHM 10k 0.5% 1/16W 0603 R4, R5, R6 0603R Res1 3  RES SMD 1K OHM 0.5% 1/16W 0603 R7, R10, R11 0603R Res1 3  RES SMD 1K OHM 0.5% 1/16W 0603 R7, R10, R11 0603R Res1 3  RES SMD 1K OHM 0.5% 1/16W 0603 R12, R17 0603R Res1 2  RES SMD 1K OHM 0.5% 1/16W 0603 R12, R17 0603R Res1 2  RES SMD 1K OHM 0.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 4  RES SMD 1K OHM 0.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4  Single-Pole, Single-BOOTO Throw Switch S1 micro button_2_SMD SW-SPST 1  Single-Pole, Single-BOOT1 Throw Switch S2, S3 micro button_2_SMD SW-SPST 2  Single-Pole, Single-RESET Throw Switch S4 micro button_2_SMD SW-SPST 1  SWITCH SW-SWST S4 micro button_2_SMD SW-SPST 1  SWITCH SW-SRSSRS SWITCH 1  ARM Cortex-M4 32-bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LOFP, -  STM32F407ZGT6 40 to 85 degC, Tray U1 OFP144-075-20X20 STM32F407ZGT6 1  AMS1117-3V3 U2, U3 SOT223 AMS1117-3V3 2	Header 2		P21	KFZEDG_3R81_ZP	Header 2	
RES SMD 1K OHM 0.5% 1/16W 0603 R2, R3, R8, R9 0603R RES 1 4 RES SMD 1K OHM 10k 0.5% 1/16W 0603 R4, R5, R6 0603R RES SMD 1K OHM 10k 0.5% 1/16W 0603 R4, R5, R6 0603R RES SMD 1K OHM 10k 0.5% 1/16W 0603 R7, R10, R11 0603R RES 1 3 RES SMD 1K OHM 0.5% 1/16W 0603 R12, R17 0603R RES 1 2 RES SMD 1K OHM 0.5% 1/16W 0603 R12, R17 0603R RES 1 4 RES SMD 1K OHM 0.5% 1/16W 0603 R13, R14, R18, R19 0603R RES 1 4 RES SMD 1K OHM 100K 0.5% 1/16W 0603 R13, R14, R18, R19 0603R RES 1 4 RES SMD 1K OHM 100K 0.5% 1/16W 0603 R13, R14, R18, R19 0603R RES 1 4 RES SMD 1K OHM 100K 0.5% 1/16W 0603 R15, R16, R20, R21 0603R RES 1 4 Single-Pole, Single-Pole, Single-Throw Switch S1 Single-Pole, Single-Throw Switch S2, S3 micro button_2_SMD SW-SPST 1 SWITCH SW1 ARM Cortex-M4 32-bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - STM32F407ZGT6 AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2	NC		R1	0603R	Res1	1
0R	110		IX.	000010	11031	
10k	0R		R2, R3, R8, R9	0603R	Res1	4
RES SMD 1K OHM 0.5% 1/16W 0603 RES SMD 1K OHM 0.5% 1/16W 0603 RES SMD 1K OHM 0.5% 1/16W 0603 RES SMD 1K OHM 51R 0.5% 1/16W 0603 R12, R17 0603R Res1 3 RES SMD 1K OHM 51R 0.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 4 RES SMD 1K OHM 0.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 Res1 8 Res1 4 Res1 4 Res1 8 Res1 4 Res1 8 Res1 4 Res1 8 Res1 8 Res1 8 Res1 4 Res1 8 Res1 8 Res1 8 Res1 8 Res1 4 Res1 8 Res1 Res1 Res1 Res1 Res1 Res1 Res1 Res1		RES SMD 1K OHM				
1k         0.5% 1/16W 0603         R7, R10, R11         0603R         Res1         3           RES SMD 1K OHM         0.5% 1/16W 0603         R12, R17         0603R         Res1         2           RES SMD 1K OHM         0.5% 1/16W 0603         R13, R14, R18, R19         0603R         Res1         4           51R         0.5% 1/16W 0603         R13, R14, R18, R19         0603R         Res1         4           100K         0.5% 1/16W 0603         R15, R16, R20, R21         0603R         Res1         4           Single-Pole, Single-Pole, Single-BOOT0         Single-Pole, Single-Pole, Single-BOOT1         Single-Pole, Single-Single-Throw Switch         S2, S3         micro button_2_SMD         SW-SPST         2           Single-Pole, Single-Pole, Single-BOOT1         SW1         SW-SPST         2         SW-SPST         2           RESET         Throw Switch         S4         micro button_2_SMD         SW-SPST         1           SWITCH         SW1         SW-8R5X8R5         SWITCH         1           ARM Cortex-M4 32-bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LOFP, -         VIII OFP, -	10k		R4, R5, R6	0603R	Res1	3
RES SMD 1K OHM 0.5% 1/16W 0603 R12, R17 0603R RES SMD 1K OHM 51R 0.5% 1/16W 0603 R13, R14, R18, R19 0603R Res1 2 RES SMD 1K OHM 100K 0.5% 1/16W 0603 R15, R16, R20, R21 0603R Res1 4 Single-Pole, Single-Throw Switch S1 Single-Pole, Single-Throw Switch S2, S3 micro button_2_SMD SW-SPST 1 Single-Pole, Single-Throw Switch S2, S3 micro button_2_SMD SW-SPST 2 Single-Pole, Single-Throw Switch S4 Single-Pole, Single-Throw Switch S4 Single-Pole, Single-Throw Switch S4 Single-Pole, Single-Throw Switch S4 Single-Pole, Single-Throw Switch SW1 SW-SPST 1 SWITCH SW1 SW-8R5X8R5 SWITCH 1  ARM Cortex-M4 32-bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - STM32F407ZGT6 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1 AMS1117-3V3 AMS1117-3V3 2						
RES   ND   1   NO   NO   NO   NO   NO   NO   NO	1K		R7, R10, R11	0603R	Resi	3
RES SMD 1K OHM   0.5% 1/16W 0603   R13, R14, R18, R19   0603R   Res1   4	787R		R12 R17	0603R	Res1	2
STR				00001		2
RES SMD 1K OHM   0.5% 1/16W 0603   R15, R16, R20, R21   0603R   Res1   4	51R		R13, R14, R18, R19	0603R	Res1	4
Single-Pole, Single-Throw Switch   S1		RES SMD 1K OHM				
BOOTO Throw Switch S1 micro button_2_SMD SW-SPST 1  Single-Pole, Single- Throw Switch S2, S3 micro button_2_SMD SW-SPST 2  Single-Pole, Single- Throw Switch S4 micro button_2_SMD SW-SPST 1  SWITCH SW1 SW-8R5X8R5 SWITCH 1  ARM Cortex-M4 32- bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/OS, 144-pin LQFP, - STM32F407ZGT6 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1  AMS1117-3V3 QFP144-0r5-20X20 STM32F407ZGT6 1	100K		R15, R16, R20, R21	0603R	Res1	4
Single-Pole, Single-Throw Switch   S2, S3   micro button_2_SMD   SW-SPST   2	DOOTO		04		OW ODOT	
BOOT1 Throw Switch S2, S3 micro button_2_SMD SW-SPST 2 Single-Pole, Single- Throw Switch S4 micro button_2_SMD SW-SPST 1 SWITCH SW1 SW-8R5X8R5 SWITCH 1  ARM Cortex-M4 32- bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - STM32F407ZGT6 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1 AMS1117-3V3 QF0144-DF1 QF23 AMS1117-3V3 2	ROO10		51	micro button_2_SMD	SW-SPST	1
Single-Pole, Single-Throw Switch   S4   micro button_2_SMD   SW-SPST   1	ROOT1		\$2 \$3	micro hutton 2 SMD	SW-SPST	2
RESET Throw Switch S4 micro button_2_SMD SW-SPST 1 SWITCH SW1 SW-8R5X8R5 SWITCH 1  ARM Cortex-M4 32- bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - STM32F407ZGT6 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1 AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2	DOOTI		JZ, JJ	ITHICI O DULLOHI_Z_SIVID	JVV-JI J I	
SWITCH SW1 SW-8R5X8R5 SWITCH 1  ARM Cortex-M4 32- bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - STM32F407ZGT6 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1  AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2	RESET		S4	micro button 2 SMD	SW-SPST	1
ARM Cortex-M4 32- bit MCU+FPU, 210 DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - STM32F407ZGT6 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1 AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2	SWITCH					1
DMIPS, 1024 kB Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1 AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2		ARM Cortex-M4 32-				
Flash, 192 kB Internal RAM, 114 I/Os, 144-pin LQFP, - 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1 AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2						
Internal RAM, 114 I/Os, 144-pin LQFP, - 40 to 85 degC, Tray U1 QFP144-0r5-20X20 STM32F407ZGT6 1 AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2						
I/Os, 144-pin LQFP, -						
STM32F407ZGT6         40 to 85 degC, Tray         U1         QFP144-0r5-20X20         STM32F407ZGT6         1           AMS1117-3V3         U2, U3         SOT223         AMS1117-3v3         2						
AMS1117-3V3 U2, U3 SOT223 AMS1117-3v3 2	STM32F4077GT6	1	U1	OFP144-0r5-20X20	STM32F4077GT6	1
	AMS1117-3V3	12 to 55 dogs, may				
	8MHz	Crystal Oscillator				1