

W5300 IP 3D Camera over Single Pair Ethernet

Ref	Qty	Value	Cmp name	Footprint	Description
C201, C202, C203, C205, C206, C210, C211, C212, C214, C215, C216, C222, C223, C224, C302, C303, C306, C310, C312, C503, C504, C505, C508, C509, C510, C513, C514, C701, C702, C703, C704, C705, C708, C710, C711, C712, C713, C715, C716, C718, C719, C721	42	100n	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C204, C213, C219, C315, C401, C402, C404	7	100n	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor
C207, C208, C217, C218, C501, C502, C506, C507, C512, C601, C602, C603, C604, C606, C607, C608, C717	17	10u	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor
C209, C403, C706, C714	4	2u2	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C220, C221, C307, C308	4	13p	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C225, C318, C319, C409	4	1n 2kV	C	Capacitor_SMD:C_1206_3216Metric	Unpolarized capacitor
C226, C227, C228, C229	4	33n	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor
C301, C305, C311	3	10n	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C304	1	680n	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C309, C407, C412, C605, C720	5	1u	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C313, C314	2	220n	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor
C316, C317, C408	3	1u	C	Capacitor_SMD:C_0805_2012Metric	Unpolarized capacitor
C405	1	330u 50V	C Polarized	Project_Specific_Passives:CP_Elec_12.5x13.5	Polarized capacitor
C406	1	10u	C	Capacitor_SMD:C_1206_3216Metric	Unpolarized capacitor
C410	1	10u	C	Capacitor_SMD:C_0805_2012Metric	Unpolarized capacitor
C411	1	100u	C	Capacitor_SMD:C_1206_3216Metric	Unpolarized capacitor
C511	1	22p	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C707	1	1n	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
C709	1	4u7	C	Capacitor_SMD:C_0603_1608Metric	Unpolarized capacitor
C722, C723	2	6p8	C	Capacitor_SMD:C_0402_1005Metric	Unpolarized capacitor
D401, D402, D403, D404, D406	5	PMEG6010CEH	PMEG6010CEH	Diode_SMD:D_SOD-123F	60V, 1A very low Vf MEGA Schottky barrier rectifier, SOD-123F
D405	1	SK56	B260	Diode_SMD:D_SMB	60V 2A Schottky Barrier Rectifier Diode, SMB
D801, D803, D804, D805, D806, D807, D808	7	LED	LED	LED_SMD:LED_0805_2012Metric	Light emitting diode
D802	1	BZX84C12	BZX84C12	Package_TO_SOT_SMD:SOT-23	300mW Zener Diode, SOT-23
F301, F302	2	0.2A	Fuse	Fuse:Fuseholder_Cylinder-5x20mm_Schurter_0031_8201_Horizontal_Open	Fuse
F401	1	0.2A	Polyfuse	Fuse:Fuse_2010_5025Metric	Resettable fuse, polymeric positive temperature coefficient
F701	1	0.5A	0ZCH0050FF2G	Fuse:Fuse_1812_4532Metric	Resettable fuse, polymeric positive temperature coefficient, small symbol
FB201, FB202, FB203, FB301, FB501, FB502, FB503, FB701, FB702, FB703, FB704, FB705	12	HH-1M1608-121JT	Ferrite_Bead_Small	Project_Specific_Passives:FB_0603_1608Metric	
FB401, FB402	2	Wuerth 742792122	Ferrite_Bead_Small	Project_Specific_Passives:FB_1206_3216Metric	
IC201	1	W5300	W5300	Project_Specific_Wiznet:QFP50P1600X1600X160-100N	TCP/IP Ethernet Controller, MII & PHY WizNet Inc W5300, Ethernet Controller, 10 Mbps, 100 Mbps, 3.3 V, 100-Pin LQFP
IC301	1	ADIN1100BCPZ	ADIN1100BCPZ	Project_Specific_AnalogDevices:ADIN1100	Ethernet ICs 10BASE-T1L PHY with 4 MDI
IC401	1	TPS26400RHFR	TPS26400RHFR	Project_Specific_TI:QFN50P400X500X100-25N-D	42-V, 2-A industrial eFuse with integrated reverse input polarity protection
IC402	1	LDL112PV33R	LDL112PV33R	Project_Specific_ST:SON95P300X300X100-7N-D	LDO Voltage Regulators 1.2 A low quiescent current LDO with reverse current protection
J201	1	RJ45	RJ45	Connector_RJ:RJ45_Amphphenol_RJHSE5380	RJ connector, 8P8C (8 positions 8 connected)
J301, J401	2	Messtechnik AK3001/2-KD-5.0	Screw_Terminal_01x02	Project_Specific_Connectors:Messtechnik_AK3001_2-KD-5.0	Generic screw terminal, single row, 01x02, script generated (kicad-library-utils/schlib/autogen/connector/)
J302	1	9452812800	9452812800	Project_Specific_Harting:09452812800	10Base-T1L connector
J402	1	Wuerth-694108301002	Barrel_Jack_Switch	Connector_BarrelJack:BarrelJack_Wuerth_6941xx301002	DC Barrel Jack with an internal switch
J501	1	Hirose FH12-24S-0.5SH(55)	Conn_01x24_Socket	Project_Specific_Connectors:Hirose_FH12-24S-0.5SH_1x24-1MP_P0.50mm_Horizontal	Generic connector, single row, 01x24, script generated
J701	1	Molex-105133-0001	USB_B_Micro	Connector_USB:USB_Micro-B_Molex-105133-0001	USB Micro Type B connector
J702	1	Conn_01x06	Conn_01x06	Connector_PinHeader_2.54mm:PinHeader_1x06_P2.54mm_Vertical_SMD_Pin1Left	Generic connector, single row, 01x06, script generated (kicad-library-utils/schlib/autogen/connector/)
L301	1	100u	L_Iron_Coupled_1324	Project_Specific_Wuerth:744871101	Coupled inductor with iron core
L401	1	470n	L	Inductor_SMD:L_1206_3216Metric	Inductor
L501	1	3u3	L	Project_Specific_Passives:FB_0603_1608Metric	Inductor
L701	1	Wuerth-744233121	744233121	Project_Specific_Wuerth:WE-CNSW_08059	Common Mode Choke
MOD401	1	AM3G-2403S-NZ	DCDC_Converter	Project_Specific_Aimtec:AM3G-NZ	
MOD601, MOD602, MOD603, MOD604, MOD605, MOD606, MOD607	7	VL53L7CX-SATEL	VL53L7CX-SATEL	Project_Specific_ST:VL53L5CX-SATEL	
P201	1	RB1-125BAG1A	RB1-125BAG1A	Project_Specific_Wiznet:WIZNET_RB1-125BAG1A	
Q601	1	A03401A	A03401A	Package_TO_SOT_SMD:SOT-23	-4.0A Id, -30V Vds, P-Channel MOSFET, SOT-23
R201, R207	2	330	R	Resistor_SMD:R_0603_1608Metric	Resistor
R202, R203, R206, R209, R316, R319	6	49R9	R	Resistor_SMD:R_0603_1608Metric	Resistor
R204, R205	2	0R	R	Resistor_SMD:R_0603_1608Metric	Resistor
R208	1	12k 1%	R	Resistor_SMD:R_0603_1608Metric	Resistor
R210, R703	2	1M	R	Resistor_SMD:R_0402_1005Metric	Resistor
R211, R212	2	75R	R	Resistor_SMD:R_0603_1608Metric	Resistor
R301, R302, R303, R304, R305, R306, R307, R308, R309, R310, R311, R313, R503, R504	14	4k7	R	Resistor_SMD:R_0402_1005Metric	Resistor
R312	1	1k5	R	Resistor_SMD:R_0402_1005Metric	Resistor
R314, R315	2	10k2	R	Resistor_SMD:R_0603_1608Metric	Resistor
R317, R318	2	5k1	R	Resistor_SMD:R_0603_1608Metric	Resistor
R320, R806, R807	3	100	R	Resistor_SMD:R_0603_1608Metric	Resistor

ToffeeCam

R321, R405	2	1M	R	Resistor_SMD:R_1206_3216Metric	Resistor
R401	1	237k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R402	1	6k8	R	Resistor_SMD:R_0603_1608Metric	Resistor
R403	1	10k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R404	1	53k6	R	Resistor_SMD:R_0603_1608Metric	Resistor
R501, R502, R601	3	10k	R	Resistor_SMD:R_0402_1005Metric	Resistor
R701	1	47k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R702	1	22k	R	Resistor_SMD:R_0603_1608Metric	Resistor
R704, R705	2	22R	R	Resistor_SMD:R_0402_1005Metric	Resistor
R706	1	49R9	R	Resistor_SMD:R_0402_1005Metric	Resistor
R707	1	330R	R	Resistor_SMD:R_0402_1005Metric	Resistor
R801, R804, R809, R810	4	330R	R	Resistor_SMD:R_0603_1608Metric	Resistor
R802, R803, R805, R808	4	4k7	R	Resistor_SMD:R_0603_1608Metric	Resistor
RV301	1	S20K30	Varistor	Project_Specific_Passives:RV_Disc_D21.5mm_W4.3mm_P10mm	Voltage dependent resistor
SW801	1	SW_Push	SW_Push	Button_Switch_THT:SW_Tactile_SPST_Angled_PTS645Vx83-2LFS	Push button switch, generic, two pins
T301	1	Wuerth-74930000	74930000	Project_Specific_Wuerth:74930000	Signal Transformer for 10Base-T1L
U301, U701	2	Wuerth TVS-82400102	WE-TVS-82400102	Package_TO_SOT_SMD:SOT-23-6	Low Capacitance TVS Diode Array, 2 Channels, SOT-23-6
U501	1	TLV74328PDBVR	TLV70215_SOT23-5	Package_TO_SOT_SMD:SOT-23-5	300mA Low Dropout Voltage Regulator, Fixed Output 1.5V, SOT-23-5
U502	1	TLV75512PDBVR	TLV70215_SOT23-5	Package_TO_SOT_SMD:SOT-23-5	300mA Low Dropout Voltage Regulator, Fixed Output 1.5V, SOT-23-5
U702	1	STM32U575ZITx	STM32U575ZITx	Package_QFP:LQFP-144_20x20mm_P0.5mm	STMicroelectronics Arm Cortex-M33 MCU, 2048KB flash, 786KB RAM, 160 MHz, 1.71-3.6V, 114 GPIO, LQFP144
Y201, Y301	2	Wuerth-830108212509	Crystal_GND24_Small	Crystal:Crystal_SMD_2016-4Pin_2.0x1.6mm	Four pin crystal, GND on pins 2 and 4, small symbol
Y701	1	ABM8G-16.000MHZ-4Y-T3	Crystal_GND24	Crystal:Crystal_SMD_Abracon_ABM8G-4Pin_3.2x2.5mm	Four pin crystal, GND on pins 2 and 4