

GUAVA CONTROLLER BOX – INTERNAL WIRING & CABLES

Type	Description	Spec / Details	MFG	MFG Part No	DiGiKEY Part No	Qty / Mach	Qty Order
Connector	Receptacle	14-POS, panel mount w. brass inserts			A106308-ND	4	
	Receptacle	-----”-----; different Keying			?		
Pin/ Socket	Socket	14-18 AWG Tin Sockets for Receptacle			A31997-ND		
Pin/ Socket	Socket	14-18 AWG Gold Sockets for Receptacle			A25012-ND		
Pin/ Socket	Socket	20-24 AWG Tin Sockets for Receptacle			A31995-ND	48	
Pin/ Socket	Socket	20-24 AWG Gold Sockets for Receptacle			A25108-ND		
*Connector	Plug	14-POS, free hanging			A1358-ND	4	
*	Plug	-----//-----; different Keying			?		
*Pin/ Socket	Pin	14-18 AWG Tin Pin for Plug			A31998-ND		
*Pin/ Socket	Pin	14-18 AWG Gold Pin for Plug			A25127-ND		
*Pin/ Socket	Pin	20-24 AWG Tin Pin for Plug			A31989-ND	48	
*Pin/ Socket	Pin	20-24 AWG Gold Pin for Plug			A25107-ND		
*Str Relief	Straight Housing	Cable Clamp for 14-Pos; 0.453” opening			A32516-ND	2	
*Str Relief	Straight Housing	Cable Clamp for 14-Pos; 0.703” opening			A33767-ND		
*Str Relief	90 Deg Housing	-----//-----; 0.453” opening; full cover			A33754-ND	1	
*Str Relief	90 Deg Housing	-----//-----; 0.453” opening; half cover			A33758-ND		
Connector	Receptacle	4-POS, panel mount w. brass inserts			A25053-ND	1	
Pin/ Socket	Socket	14-18 AWG Tin Sockets for Receptacle			A31997-ND	2	
Pin/ Socket	Socket	14-18 AWG Gold Sockets for Receptacle			A25012-ND		
Pin/ Socket	Socket	20-24 AWG Tin Sockets for Receptacle			A31995-ND	2	
*Connector	Plug	4-POS, free hanging			A1357-ND	1	
*Pin/ Socket	Pin	14-18 AWG Tin Pin for Plug			A31998-ND	2	
*Pin/ Socket	Pin	14-18 AWG Gold Pin for Plug			A25127-ND		
*Pin/ Socket	Pin	20-24 AWG Tin Pin for Plug			A31989-ND	2	
		* Not Box (Internal) BOM					

Type	Description	Spec / Details	MFG	MFG Part No	DiGiKEY Part No	Qty/ Mach	Qty Order
*Str Relief	Straight Housing	Cable Clamp for 4-Pos; 0.217" opening			A99541-ND		
*Str Relief	Straight Housing	Cable Clamp for 4-Pos; 0.329" opening			A104910-ND	1	
*Str Relief	Straight Housing	Cable Clamp for 4-Pos; 0.453" opening			A32518-ND		
*Str Relief	90 Deg Housing	-----//-----; 0.329" opening; full cover			A32501-ND		
*Str Relief	90 Deg Housing	-----//-----; 0.329" opening; half cover			A33756-ND		
Connector	Receptcl/Socket	D-Sub RCPT 25POS IDC	3M	8350-7005	3M15414-ND	1	
*	Plug	D-Sub Plug 25POS IDC	3M	8225-8000	3M15408-ND	1	
*Str Relief	Back Shell	Backshell DB25 Flat Ribbon	Norcomp	976-025-010R031	976-25RPE-ND	1	
Connector	Housing	8-POS .100 Dual (Black)	Molex	22-55-2081	WM2521-ND	1	
Connector	Housing	20-POS .100 Dual (Black)	Molex	22-55-2201	WM2527-ND	1	
Crimp	Female/Socket	Connector Crimp - Socket	Molex	0016020102	WM2510-ND	18	
Connector	LCD Socket	IDC 10POS Dual 30AU	FCI	71600-010LF FCI	609-1739-ND	2	
Cable	Flat	Cable 25 Cond 100FT Shield Flat	3M	3517/25 100SF	MB25H-100-ND	1	
Connector	Thermistor/switch	Connector Housing 2POS .100 W/Latch	Molex	0050579452	WM2900-ND	6	
Connector	Motor Conn	Connector Housing 4POS .100 W/Latch	Molex	0050579404	WM2902-ND	6	
Connector	Switch Conn	Connector Housing 3POS .100 W/Latch	Molex	0050579403	WM2901-ND	3	
**Connector	Socket/ Female	Connector Term Female 22-24AWG Tin	Molex	0016020102	WM2510-ND	30	
* Connector	Housing	Conn Housing Male 2POS .100	Molex	0701070001	WM2533-ND		
* Connector	Pin/ Male	Conn Term Male Pin 24-30AWG Tin	Molex	0016020108	WM2565-ND		
* Connector	Housing	Conn Housing Male 4POS .100	Molex	0701070003	WM2535-ND		
Terminal	24V Power Switch	Conn Fast Receptacle 14-16 AWG .250	TE Conn.	3-350820-2	A27824-ND	5	
Terminal	Grounding	Term Ring Non Ins 26-22AWG #4	Panduit	P22-4R-M	298-10067-ND	4	
Switch	Power Switch	Switch Rocker DPST 20A 125V	E-Switch	R5ABLKBLKFF0	EG1529-ND	1	
	(2nd Source)	Switch Rocker DPST 16A 125V	Cherry	WRG32F2FBBNN	CH784-ND		
Wire/ Cable	Motor Power	Shielded 4Cond 22AWG / 100Ft	Gen Cable	C07623.12.10	W504-100-ND	1	
		Shielded 4Cond 22AWG / 500 ft			W504-500-ND		
		Shielded 4Cond 22AWG / 1000 ft			W504-1000-ND		
Wire	Bed Heat Power	16AWG Stranded – Violet – 100 ft	Gen Cable	C2065A.12.19	C2065V-100-ND	1	

Type	Description	Spec / Details	MFG	MFG Part No	DiGiKEY Part No	Qty/Mach	
		16AWG Stranded – Violet – 1000 ft	Gen Cable	C2065A.12.19	C2065V-1000-ND		
Wire	Bed Thermistor	24AWG Stranded – Yellow – 100 ft	Gen Cable	C2015A.12.05	C2015Y-100-ND	1	
		24AWG Stranded – Yellow – 1000 ft	Gen Cable	C2015A.21.05	C2015Y-1000-ND		
Wire	Ext Power (2)	24AWG Stranded – Red – 100 ft	Gen Cable	C2015R.12.03	C2015R-100-ND	1	
		24AWG Stranded – Red – 1000 ft	Gen Cable	C2015R.21.03	C2015R-1000-ND		
Wire	Ext Thermistor (2)	24AWG Stranded – Orange – 100 ft	Gen Cable	C2015A.12.04	C2015A-100-ND	1	
		24AWG Stranded – Orange – 1000 ft	Gen Cable	C2015A.21.04	C2015A-1000-ND		
Wire	Ext Fan (2)	24AWG Stranded – Red – 100 ft	Gen Cable	C2015R.12.03	C2015R-100-ND	1	
		24AWG Stranded – Red – 1000 ft	Gen Cable	C2015R.21.03	C2015R-1000-ND		
Wire		24AWG Stranded – Black – 100 ft	Gen Cable	C2015A.12.01	C2015B-100-ND	1	
		24AWG Stranded – Black – 1000 ft	Gen Cable	C2015A.21.01	C2015B-1000-ND		
Wire	Ext Motor (2)	Same as Motor Power Wire - ?? mm					
Wire	24VDC	16AWG Stranded – Red – 100 ft	Gen Cable	C2065A.12.03	C2065R-100-ND	1	
		16AWG Stranded – Red – 1000 ft	Gen Cable	C2065A.21.03	C2065R-1000-ND		
Wire	24VDC Common	16AWG Stranded – Yellow – 100 ft	Gen Cable	C2065A.12.05	C2065Y-100-ND	1	
		16AWG Stranded – Yellow – 1000 ft	Gen Cable	C2065A.21.05	C2065Y-1000-ND		
Wire	Z-Right Motor	Same as Motor Power Wire - ?? mm					
	Z- Left Motor	Same as Motor Power Wire - ?? mm					
Wire	Z- Switch	24AWG Stranded – White – 100 ft	Gen Cable	C2015A.12.02	C2015W-100-ND	1	
		24AWG Stranded – White – 1000 ft	Gen Cable	C2015A.21.02	C2015W-1000-ND		
Wire		24AWG Stranded – Black – 100 ft	Gen Cable	C2015A.12.01	C2015B-100-ND	1	
		24AWG Stranded – Black – 1000 ft	Gen Cable	C2015A.21.01	C2015B-1000-ND		
Wire	X- Motor	Same as Motor Power Wire - ?? mm					
Wire	X- Switch	24AWG Stranded – White – 100 ft	Gen Cable	C2015A.12.02	C2015W-100-ND	1	
		24AWG Stranded – White – 1000 ft	Gen Cable	C2015A.21.02	C2015W-1000-ND		
Wire		24AWG Stranded – Black – 100 ft	Gen Cable	C2015A.12.01	C2015B-100-ND	1	
		24AWG Stranded – Black – 1000 ft	Gen Cable	C2015A.21.01	C2015B-1000-ND		
Wire	Y- Motor	Same as Motor Power Wire - ?? mm					
Wire	X- Switch	24AWG Stranded – White – 100 ft	Gen Cable	C2015A.12.02	C2015W-100-ND	1	

		24AWG Stranded – White – 1000 ft	Gen Cable	C2015A.21.02	C2015W-1000-ND		
Wire		24AWG Stranded – Black – 100 ft	Gen Cable	C2015A.12.01	C2015B-100-ND	1	
		24AWG Stranded – Black – 1000 ft	Gen Cable	C2015A.21.01	C2015B-1000-ND		
TB	Power Plug	Term Block Plug 6POS STR 5.08MM	Molex	39530-0006	WM7822-ND	1	
TB	Heat & Fan	Term Block Plug 2POS STR 5.08MM	Molex	39530-0002	WM7819-ND	5	
Wire Tubing	Corrugated Tubing	TUBING CORRUGATED LOOM .25"X100'	Panduit	CLT25F-C20	298-1141-ND	1	

TOOLS

Type	Description	Spec / Details	MFG	MFG Part No	DiGiKEY Part No	Qty/ Mach	Qty Order
Hand Tool	Crimp Tool	TOOL CRIMPER RATCHETING 16-24AWG	TE Conn.	91505-1	A9841-ND		
Hand Tool	Insertion Tool	TOOL INSERTION CPC CONTACTS	TE Conn.	200893-2	200893-2-ND		
Hand Tool	Extraction Tool	CONTACT EXTRACTION TOOL	TE Conn.	305183	A1329-ND		
Bench Tool	Applicator	(TBD)					
Bench Tool	Flat C/Conn Press	HAND PRESS BENCH MOUNT	PanaVise	502	502PV-ND		
		HAND PRESS IDC CONVERSION KIT	PanaVise	506	506PV-ND		
		BASE PLATE SOCKET IDC	PanaVise	510	510PV-ND		
Hand Tool	Crimp Tool	TOOL CRIMP CGRD KK MICROFIT SPOX	Molex	0640160201	WM17552-ND		
Hand Tool	Insertion Tool	TOOL HAND INSERTION	Molex	0011020022	WM9911-ND		
Hand Tool	Extraction Tool	TOOL HAND EXTRACTION	Molex	0011030036	WM1032-ND		
Bench Tool	Applicator	TOOL APPLICATOR 22-24AWG CRIMP	Molex	0639023200	WM6338-ND		
Hand Tool	Pwr SW Terminal	HAND CRIMP TOOL/FASTOS(W/O DIES)	TE Conn.	58078-3	A28005-ND		
	Dies	DIE SET ULTRA-FASTONS 16-14 AWG	TE Conn.	90391-3	A28008-ND		

Type	Description	Spec / Details	MFG	MFG Part No	MOUSER ELEC.	Qty/ Mach
Connector	Housing	Heavy Duty Power Connectors PP15/45 HOUSING ONLY - BLACK			879-1327G6-BK (Mouser Part no)	2
Connector	Terminal	Heavy Duty Power Connectors PP15 #16-20 AWG CONT LOW DETENT			879-1332-BK (Mouser Part No)	2
*Cable	LCD External Flat Cable	Flat Cables .050" 10C Shielded Black 28AWG Stranded	3M	3517/10-1005	517-3517/10	
Type	Description	Spec / Details	MFG	MFG Part No	McMaster-Carr	Qty/ Mach
* Shrink Tubing	Motor EMI Tubing	EMI/RFI-Shield Heat-Shrink Tubing 3/16" ID Before, 3/32" ID After - 48" Length, Black.			7937K21	1
* Wire Tubing	Shroud Tubing					
Standoff	4-40 Screw Size Hex Standoff	Aluminum Male-Female Threaded Hex Standoff, 3/16" Hex, 3/16" Length,			93505A853 – Screw Size 4-40	

** If go to Applicator, then part number: WM2510CT for Tape Reel

* Not part of Box (Internal) BOM