

# Bill of Materials

TI DESIGNS

TIDA-00293

Item	Qty	Reference	Value	Part Description	Manufacturer	Manufacturer Part Number	Alternate Part	PCB Footprint	Note
1	1	LightCrafter 4500 EVM	LCR4500	DLP LightCrafter 4500 Evaluation	Wintech	DLPLCR4500EVM			
2	1	BeagleBone MSTP Cape	Microcontroller	Motor Drive And Exposure Synchronization Cape	CircuitCo	BeagleBone MSTP Cape			Drawings found in path: ..\Design Files\BeagleBone MSTP Cape\
3	1	Velmex XSlide	XSlide	Z-Axis Translation Stage	Velmex	XN10-0060-M01-21			
4	1	3D Printer Level Translator		3.3-V Logic to 5-V Logic Translation and 5-V power generation for LCD screen	None	N/A			Drawings found in path: ..\Design Files\3D Printer Level Translator\
5	1	NEMA 23 Stepper Motor	Bipolar Stepper	24V DC Bipolar Stepper Motor	Minebea Motor Mfg. Corp.	23KM-K249BT04CA			
6	1	20x4 Character LCD	LCD	White on Blue LCD Screen	Pololu	1219			
7	1	Front Panel NEXT Button	Button	Momentary SPST Push Button	C&K	TP11LTZQE			
8	1	Front Panel BACK Button	Button	Momentary SPST Push Button	C&K	TP11LTZQE			
9	1	12V DC Fan	Fan	Chassis Fan	Mechatronics	F8025L-H			
10	1	12V 5A DC Power Supply	DC Power	Universal AC to 12V DC Power Adapter	ASTEC	DPS53			
11	1	TTL-232R-3V3	USB-Serial	Serial Communication Adapter For 3.3V Logic Levels	FTDI	TTL-232R-3V3			
12	1	12-V Jack	Jack	12-V Power Distribution Jack	CUI Inc	PJ-065B			
13	1	Exposure LED	Violet	420-425 nm LED	Philips Lumileds	LHUV-0420-0650			Host board drawings found in path: ..\Design Files\LightCrafter 4500 Modifications\Philips Violet LED board.pcb
14	1	USB 2.0 Male A to Mini B Cable	USB	USB Cable	Various	N/A			
15	2	Projection Optics Shim	Shim	Reduces focal distance of LCr 4500 EVM	N/A	TI Drawing # 2514194			Drawings found in path: ..\Design Files\LightCrafter 4500 Modifications\
16	1	Mechanical Structure		Mechanical base to hold translation stage, LightCrafter 4500, and the resin container	N/A	TI Drawing # 2514196			Drawings found in path: ..\Design Files\Mechanical Structure\

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17	1	12-V DC Power Distribution Cables Assembly		12-V DC Power distribution cables inside of DLP 3D Printer chassis	N/A	TI Drawing # 2514178			Drawings found in path: ..\Design Files\Cable Drawings\
18	1	FP Switch Cable Assembly		Cable assembly to connect front panel switches to microcontroller	N/A	TI Drawing # 2514180			Drawings found in path: ..\Design Files\Cable Drawings\
19	1	LCD to Translator Cable Assembly		Cable assembly connecting level translator board to LCD controller	N/A	TI Drawing # 2514182			Drawings found in path: ..\Design Files\Cable Drawings\
20	1	LightCrafter Trigger Cable Assembly		Cable assembly to connect LightCrafter 4500 to microcontroller	N/A	TI Drawing # 2514184			Drawings found in path: ..\Design Files\Cable Drawings\
21	1	Limit Switch Cable Assembly		Cable assembly connecting limit switches to microcontroller	N/A	TI Drawing # 2514185			Drawings found in path: ..\Design Files\Cable Drawings\
22	1	MSTP Cape to Translator Cable Assembly		Cable connecting microcontroller to level translator board	N/A	TI Drawing # 2514179			Drawings found in path: ..\Design Files\Cable Drawings\
23	1	RS232 to MSTP Cape Cable Assembly		Cable connecting microcontroller to TTL cable	N/A	TI Drawing # 2514181			Drawings found in path: ..\Design Files\Cable Drawings\
24	1	Stepper Motor Cable Assembly		Cable to connect stepper motor phases to microcontroller	N/A	TI Drawing # 2514183			Drawings found in path: ..\Design Files\Cable Drawings\

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