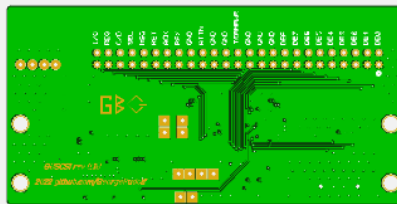
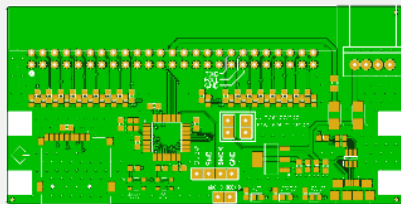


Detected 4 layer board of 43x86mm(1.69x3.39 inches) .

Your upload has finished processing. Enter the project details below and we'll move on to checking all the individual layers to make sure that they're correct.

[← Back to Upload File](#)[Gerber Viewer](#)

Base Material	<input type="radio"/> FR-4	<input type="radio"/> Aluminum					
Layers	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 4	<input type="radio"/> 6			
Dimensions	<input type="text" value="43"/>	*	<input type="text" value="86"/>	<input type="text" value="mm"/>			
PCB Qty	<input type="text" value="5"/>						
Product Type	<input checked="" type="radio"/> Industrial/Consumer electronics	<input type="radio"/> Aerospace	<input type="radio"/> Medical				
Different Design	<input checked="" type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3	<input type="radio"/> 4			
Delivery Format	<input checked="" type="radio"/> Single PCB	<input type="radio"/> Panel by Customer	<input type="radio"/> Panel by JLCPCB				
PCB Thickness	<input type="radio"/> 0.4	<input type="radio"/> 0.6	<input type="radio"/> 0.8	<input type="radio"/> 1.0	<input type="radio"/> 1.2	<input checked="" type="radio"/> 1.6	<input type="radio"/> 2.0
Impedance	<input checked="" type="radio"/> No	<input type="radio"/> Yes	Impedance calculator >				
Layer stackup	Fill in your layer sequence						
	L1(Top layer)	GBSCSI-01B-release - CAD/CAM Top Copper.GBR					
	L2(Inner layer1)	GBSCSI-01B-release - CAD/CAM Inner 1.GBR					
	L3(Inner layer2)	GBSCSI-01B-release - CAD/CAM Inner 2.GBR					
	L4(Bottom layer)	GBSCSI-01B-release - CAD/CAM Bottom Copper.GBR					
PCB Color	<input checked="" type="radio"/> Green	<input type="radio"/> Purple	<input type="radio"/> Red	<input type="radio"/> Yellow	<input type="radio"/> Blue		
	<input type="radio"/> White	<input type="radio"/> Black					
Silkscreen	<input checked="" type="radio"/> White						
Silkscreen Technology	<input checked="" type="radio"/> Ink-jet/Screen Printing Silkscreen	<input type="radio"/> High-definition Exposure Silkscreen					
Surface Finish	<input checked="" type="radio"/> HASL(with lead)	<input type="radio"/> LeadFree HASL-RoHS	<input type="radio"/> ENIG-RoHS				
Outer Copper Weight	<input checked="" type="radio"/> 1 oz	<input type="radio"/> 2 oz					
Inner Copper Weight	<input checked="" type="radio"/> 0.5 oz	<input type="radio"/> 1 oz	<input type="radio"/> 2 oz				
Gold Fingers	<input checked="" type="radio"/> No	<input type="radio"/> Yes					

Welcome to the turnkey GBSCSI ordering tutorial for JLCPCB!

I have aimed at making this as simple as possible, and have already validated the files by ordering myself, thus saving you trouble.

First, go to jlcpcb.com, and create an account if you don't yet have one.

Upload the Gerber file. You'll be presented with this screen. The default options here all work.

No need to mess with any of these options. JLC will assemble 5 boards for free, no point in ordering more (why would you want to assemble this by hand?)

Fill in the layer info like shown here. Top, Inner 1, Inner 2, Bottom.

Green silkscreen works best. It's also the G in GBSCSI.

Material Type

Confirm Production file

Flying Probe Test

Castellated Holes

Remove Order Number

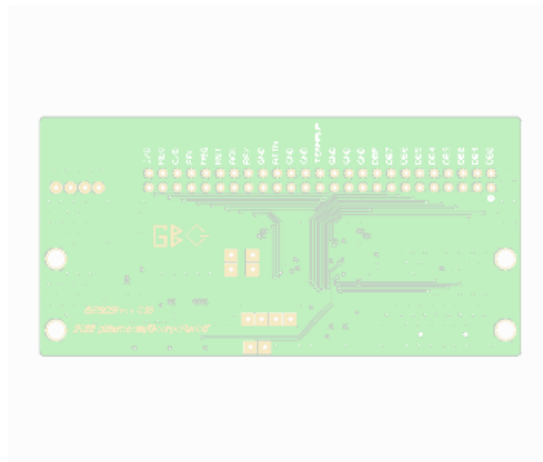
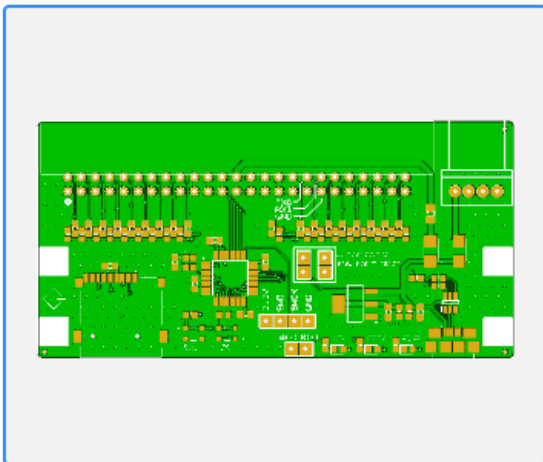
Advanced Options

PCB Remark

Leave these alone as well. ENIG is gold plating, but we don't need that here.

You guessed it – no need to change these either.

 **PCB Assembly** Coupon Free Assembly for your PCB order ☒



☒ Assemble top side

☐ Assemble bottom side

Toggle the assembly button

PCBA Type [What's the difference?](#)

Assembly Side

PCBA Qty

Tooling holes

Confirm Parts Placement

☒ I agree to the Terms and Conditions of JLCPCB SMT Service.

Confirm

Again, leave all as default, agree to terms, and confirm.

The screenshot shows the 'Upload BOM/CPL' step of the EasyEDA PCB design process. At the top, a progress bar indicates four steps: PCB, Upload BOM/CPL (current), Select Parts, and Quote. Below the progress bar, there are two upload areas. The left area is for the BOM (Bill of Materials) and shows a file named 'GBSCSL01B_BOM_SMD...' with a checkmark and an upload icon. Below it, it says 'Only accept XLS,XLSX,CSV.' and there is a link to 'View Sample BOM'. The right area is for the CPL (Component Placement) and shows a file named 'GBSCSL01B_pnp_SMD...' with a checkmark and an upload icon. Below it, it says 'Pick&Place File,Only accept XLS,XLSX,CSV.' and there is a link to 'View Sample CPL'. Below these two areas, there is a section titled 'Please help to select the correct usage description for your product.' with a dropdown menu showing 'serch\Education\DIY\Entertainment - DIY'. Below the dropdown, there is a link to 'Not sure where to start? Check our SMT FAQs page.' and a tip: 'Tips: With EasyEDA, you can generate BOM/CPL files with a single click.' At the bottom right, there is a blue 'NEXT' button.


















































Plug in the BOM (Bill of Materials) and cpl (component placement) files for the variant you desire. I recommend just using their SMD service and doing whatever thru-hole parts you need at home. Another option is to use the “_all” files and remove the lines corresponding to the pinheaders, leaving JLC to assemble just the 50 pin SCSI and power connector. Or just SCSI. Whatever works best for you. Do note they charge an additional \$2 per connector type, a hand soldering fee, plus a fee per solder joint. The SCSI connector is thus the most expensive part to require JLC hand soldering.

Alternatively, upload the “_all” variants wait until the next step – it’ll let you choose the parts you want placed.

Select the DIY option, and hit next...

Top Side Select the parts you want to assemble on your boards. No restrictions on using extended parts for each order now.

Total 24 parts detected 24 Parts confirmed 0 parts not selected

Uploaded BOM Data			Review Matched Parts						
Top Designator	Comment	Footprint	Matched Part Detail	Qty	Source	Lib Type	Total Cost	Select 	
D5	KT0603R (Red L...	LED0603	KT0603R Red 615~630nm 1.9~2.2V 0603 Li...	C2286 	5	JLPCPB	Basic	\$0.0270 	
U2	AMS1117-3.3	SOT-223	AMS1117-3.3 72dB@ (120Hz) 1A 1.3V@ (800mA) F...	C6186 	5	JLPCPB	Basic	\$0.7395 	
D3	USBLC6-2SC6	SOT-23-6	USBLC6-2SC6 17V 5A 5.25V 6V Unidirectional...	C7519 	10	JLPCPB	Extended	\$1.9620 	
C1,C2,C3,C...	100n	C0603	CC0603KRX7R9BB104 50V 100nF X7R ±10% 0603 Multi...	C14663 	40	JLPCPB	Basic	\$0.0840 	
D1,D2	SS210	SMA	SS210 100V 850mV@2A 2A SMA(DO-214AC)...	C14996 	10	JLPCPB	Basic	\$0.2860 	
C8,C9	1.0u	C0603	CL10A105KB8NNNC 50V 1uF X5R ±10% 0603 Multila...	C15849 	10	JLPCPB	Basic	\$0.0290 	
R37	1.5K	R0603	0603WAF1501T5E 1/10W Thick Film Resistors 75V...	C22843 	5	JLPCPB	Basic	\$0.0055 	
R38,R39	20R	R0603	0603WAF200JT5E 1/10W Thick Film Resistors 75V...	C22950 	10	JLPCPB	Basic	\$0.0110 	
R2,R4,R6,R...	220R	R0603	0603WAF2200T5E 1/10W Thick Film Resistors 75V...	C22962 	90	JLPCPB	Basic	\$0.0900 	
R1,R3,R5,R...	330R	R0603	0603WAF3300T5E 1/10W Thick Film Resistors 75V...	C23138 	90	JLPCPB	Basic	\$0.0900 	
R42,R43,R4...	510R	R0603	0603WAF5100T5E 1/10W Thick Film Resistors 75V...	C23193 	15	JLPCPB	Basic	\$0.0150 	
J2	C31753	2.54mm	C31753 1x4P 1 2.54mm 4 PlugIn,P=2.54mm...	C31753 	5	JLPCPB	Extended	\$0.1165 	
R40,R41	22K	R0603	0603WAF2202T5E 1/10W Thick Film Resistors 75V...	C31850 	10	JLPCPB	Basic	\$0.0100 	
D4	19-213/Y2C-CQ2R...	LED0603	19-213/Y2C-CQ2R2L/3T(CY) 20mA 180mcd 2.3V 591nm Colorle...	C72038 	5	JLPCPB	Basic	\$0.1075 	
D6	19-217/GHC-YR1S...	LED0603	19-217/GHC-YR1S2/3T 20mA 285mcd 3.3V 518nm Colorle...	C72043 	5	JLPCPB	Basic	\$0.1410 	
F1	0805L100WR	F0805	0805L100WR 6V 1A 10A -40°C~+85°C 1.95A 60mD...	C80270 	15	JLPCPB	Extended	\$3.1605 	

Which will lead you to this screen. Don't unselect anything here, except J2 if you don't want a power connector...

Or the ones here, which are the programming header (J4), jumper blocks and LED header (JP1, JP2, J6), and SCSI connector (J1). Those are the only components I consider optional. Though I suppose you could choose to omit USB (J5, R37, R38, R39, D3). Or omit the fuse and install a blob of wire. Or if not using external power, omitting D1... Well, these are power user options. If you're a total newbie, just leave it all as-is.

Again, click next at the bottom of the page.

J3	TF-01A	SMD	TF-01A C91145 Deck MicroSD card (TF card) Se...	5	JLCPCB	Extended	\$0.8865	<input checked="" type="checkbox"/>
X01	SG-8018CG_8 (8M...	SMD	SG-8018CG 8.000000MHz TJHSA C390520 ±50ppm 1.8V~3.3V 8MHz -40°C~+10...	10	JLCPCB	Extended	\$7.6740	<input checked="" type="checkbox"/>
JP1,JP2,J6	PZ254V-11-02P	HDR-TH_2P-P2.54...	PZ254V-11-02P C492401 Straight Square Pins 2.5mm 6mm...	17	JLCPCB	Extended	\$0.1938	<input checked="" type="checkbox"/>
J4	PZ254V-11-04PA	HDR-TH_4P-P2.54...	PZ254V-11-04P C492403 Straight Square Pins 2.5mm 6mm...	6	JLCPCB	Extended	\$0.1332	<input checked="" type="checkbox"/>
U1	APM32F103CBT6	LQFP48	APM32F103CBT6 C526178 128KB -40°C~+85°C 2V~3.6V 1@x6ch...	5	JLCPCB	Extended	\$12.3500	<input checked="" type="checkbox"/>
J1	321050RG0ABK00A...	2.54mm 50P	321050RG0ABK00A04 C601962 2.54mm Shrouded Gold Brass 25 ...	5	JLCPCB	Extended	\$1.1860	<input checked="" type="checkbox"/>
SW1,SW2	GT-TC025D-H0065...	SMD	GT-TC025D-H0065-L1 C778132 No NO J pin 50mA 3mm 100MQ 100...	11	JLCPCB	Extended	\$0.4895	<input checked="" type="checkbox"/>
J5	10118192-0002LF	SMD	10118192-0002LF C2972784 1 Surface Mount 5 Female Micro...	5	JLCPCB	Extended	\$1.5390	<input checked="" type="checkbox"/>

The screenshot displays the JLCPCB SMT Service interface. At the top, there are four steps: PCB, Upload BOM/CPL, Select Parts, and Quote. The main area shows a 3D preview of a green PCB populated with various components. To the right, a price breakdown table is visible.

Price	BOM
Components	\$32.22
Extended components fee	\$20.51
SMT Assembly	\$2.83
Setup fee	\$8.00
Stencil	\$1.50
Hand-soldering labor fee	\$3.50
Manual Assembly	\$5.54
Total Price	\$82.10

Below the table is a blue button labeled "Save To Cart". At the bottom of the interface, there is a note: "* The preview for reference only. Check final part placement at DFM Analysis in Order History in 4-6 hours after placing the order."

This page should present you a very nice preview of the assembled PCB – note that the fully populated variant is selected here. Using the “_SMD” files won’t show the thru-hole components. Any parts you may have chosen to deselect will also not appear here. Take a good peek at it, see if looks right – if you unselected something by mistake, there’s a “go back” button at the bottom of the page which you can use to go back and rectify things. Note the cost breakdown on the right hand panel – notice how the thru-hole parts add cost. Still, less shipping, we’re still at under \$16.50 per board! New users also get coupons, so you can probably go cheaper still. Using coupons and doing thru-hole yourself, with the cheapest shipping option, you should be able to reach \$12ish per board. Maybe lower.

With that, you’re ready to check out.

I am not a new JLC user, so for me, the first run cost \$13.81 per, including shipping. The boards arrived at my doorstep exactly two weeks after ordering, and the local postal service isn’t exactly quick. YMMV.

If you’ve never had a look at how ordering your own PCBs works, I hope this serves as an encouraging first step into new DIY territory. Go find some friends to split the cost of the run, and have fun with these.

Best wishes,

George Rudolf Mezzomo