Qty	Name/Value	Description	Vendor	Part Number	Part ID
	Electronic Parts				
1	XEL-CF3 PCB	2-Layer, 1.6 mm board thickness, 2 designs on panel	EasyEDA or ALLPCB	Version 1.1	Upload Gerber Files to Website
1	74F138N	3-8 Line Decoder/DeMux	Digi-Key	296-3552-5-ND	U1 HIGH SPEED DEVICE REQUIRED
1	74F32N	Quad 2-Input OR Gate	Digi-Key	296-3583-5-ND	U2 HIGH SPEED DEVICE REQUIRED
1	74F00N	Quad 2-Input NAND Gate	Digi-Key	296-3539-5-ND	U3 HIGH SPEED DEVICE REQUIRED
1	74F245N	Octal Bus Transceiver with 3-state outputs	Digi-Key	296-3572-5-ND	U4 HIGH SPEED DEVICE REQUIRED
1	1N914	Diode 100V 200ma DO35	Digi-Key	1N914BCT-ND	D1
1	PN2222	Transistor NPN 40V 1A TO-92	Digi-Key	PN2222AD26ZCT-ND	Q1
3	0.1uf	Capacitor Ceramic 50V Radial	Digi-Key	399-4329-ND	C1,C2,C3
2	1K	Resistor 1/4W 5% Axial	Digi-Key	1.0KQBK-ND	R1,R2
2	390Ω	Resistor 1/4W 5% Axial	Digi-Key	390QBK-ND	R3.R4
2	75Ω	Resistor Network Isolated, 6-pin	Mouser	652-4606X-102-750LF	RN1,RN2
1	MPBI	0.1" Stacking Female Header PI A+/B+/PI 2	Digi-Key	1528-1385-ND	J1
1	STATS	0.1" SIL 6-pin Male Header	Phoenix Enterprises	HWS2382	J2
1	IDE44	2mm 2X22 Dual Row Header Straight	Phoenix Enterprises	HWS4581	J3
2	14-pin IC Socket	0.3 width, dual wipe, IC socket	Digi-Key	AE9989-ND	U2,U3
1	16-pin IC Socket	0.3 width, dual wipe, IC socket	Digi-Key	AE9992-ND	U1
1	20-pin IC Socket	0.3 width, dual wipe, IC socket	Digi-Key	AE9998-ND	U4

Mechanical Parts (Optional – used with Right Angle Panel Mounting Board)

Qty	Name/Value	Description	Vendor	Part Number	Part ID
4	2-56 Threaded Standoff	2-56 x 1/4" length, ALUMINUM	Jameco	2235410	CF-IDE44 Adapter Mounting
8	2-56 Pan Head Screw	2-56 x 3/16" length, SST (or plated steel)	eBay or other	LINK	"
4	4-40 Pan Head Screw	4-40 x 1/4" length, Zinc Plated Steel	Jameco	2094389	CF Assembly Panel Mounting
2	4-40 RT/Angle Bracket	4-40 x .25" x .375", 0.62" Nickel Plated Steel Bracket	Jameco (keystone 621)	1581530	"

3rd Party Modules and Accessories

Qty	Name/Value	Description	Vendor	Part Number	Part ID
*	Single CF-IDE44 Adapter PCB	CF-IDE44/2.0mm Adapter V.H2 (* choose one)	AliExpress	LINK	Single CF Adapter Board
*	Dual CF-IDE44 Adapter PCB	CF-IDE44/2.0mm Adapter V.H0 (* choose one)	Brando.com	UCABL007500	Dual CF Adapter Board
1	IDE44 Laptop HDD Cable	2.5" Laptop HDD Cable (Length = short as possible)	eBay or other	IDE44 6" Laptop Cable	

Board Assembly Notes

It is assumed that the assembler of this board is fairly proficient with mechanical assembly and soldering of electronic components. Previous printed circuit board assembly experience is preferred.

The connector that will be used for MPBI interface needs to be modified from it's original size of 20x2 pins, and reduced to a 17x2 connector. Best way to accomplish this, is to cut it on the far side of 18 pins, and then file or sand off the excess material.
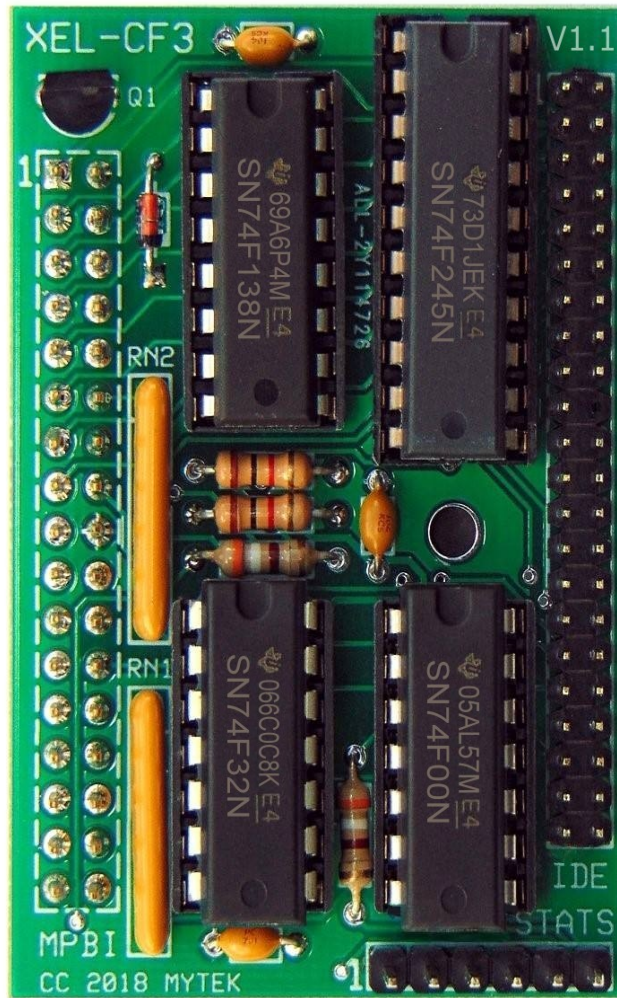
Order of assembly

The MPBI connector absolutely must be the first component soldered into the board, or at least done before any of the IC sockets have been installed. It is also the only component that gets installed from the back side of the board, and soldered from the top side. DO NOT CUT OFF THE EXTENDED PINS ON THE TOP SIDE.

After this connector is soldered in place, there is no preferential order to soldering of the remaining components.

The IDE44 connector will need to have one pin extracted before installation. If you try to insert it into the board it will quickly become apparent which pin needs to be removed. This missing pin is a 'key' that sometimes gets used to prevent the mating connector from misalignment. Unfortunately not all cable assemblies support this.

When connecting to a CF-IDE44 adapter board, be sure to align the pin 1 connection on each side (pin 1 on the adapter board is just above the 'J' on the word 'Jumper').

Right Angle Mounting Board: mount the CF-IDE44 adapter board to it, using the hardware specified in this BOM. Dual CF adapters will require some material be removed either from the lower CF card holder housing, or the front standoffs.

XEL-CF3 IDE to Compact Flash Interface Board

Optional Panel to allow right angle mounting of CF-IDE44 adapter.

Adapter to convert IDE44 connection to Compact Flash
(shown attached to right-angle mounting panel)