Qty	Name/Value	Description	Vendor	Part Number	Part ID
Electronic Parts					
1	XEL-CF-][PCB	2-Layer, 1.6 mm board thickness, 2 designs on panel	EasyEDA or ALLPCB	Version 1.0	Upload Gerber Files to Website
1	74HCT138	3-8 Line Decoder/DeMux	Digi-Key	296-1608-5-ND	U1
1	74HCT00	Quad 2-Input NAND Gate	Digi-Key	296-1603-5-ND	U2
1	74HCT573	Octal D-type transparent latch with 3-state outputs	Digi-Key	296-2128-5-ND	U3
1	74HCT245	Octal Bus Transceiver with 3-state outputs	Digi-Key	296-1612-5-ND	U4
3	0.1uf	Capacitor Ceramic 50V Radial	Digi-Key	399-4329-ND	C1,C2,C3
1	390Ω	Resistor 1/4W 5% Axial	Digi-Key	390QBK-ND	R1
1	MPBI	0.1" Stacking Female Header PI A+/B+/PI 2	Digi-Key	1528-1385-ND	J1
1	LED	0.1" SIL 2-pin Male Header	Phoenix Enterprises	HWS9026	J2
1	IDE44	2mm 2X22 Dual Row Header Straight	Phoenix Enterprises	HWS4581	J3
1	14-pin IC Socket	0.3 width, dual wipe, IC socket	Digi-Key	AE9989-ND	U2
1	16-pin IC Socket	0.3 width, dual wipe, IC socket	Digi-Key	AE9992-ND	U1
2	20-pin IC Socket	0.3 width, dual wipe, IC socket	Digi-Key	AE9998-ND	U3,U4

Mechanical Parts

Qty	Name/Value	Description	Vendor	Part Number	Part ID
4	2-56 Threaded Spacer	2-56 x 1/8" diameter x 1/4" length ALUM	eBay or other		CF-IDE44 Adapter Mounting
8	2-56 Pan Head Screw	2-56 x 1/8" length SST	eBay or other		"
4	4-40 Pan Head Screw	4-40 x 1/4" length SST	eBay or other		CF Assembly Panel Mounting
2	4-40 RT/Angle Bracket	4-40 x .25" x .375", 0.62" Nickel Plated Steel Bracket	Digi-Key	36-621-ND	"

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 x desired length	eBay or other		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.

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.

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.

Before actual assembly begins, you may have noticed on the version with a mounting board, the two different boards are attached to each other by a small tab with multiple closely spaced holes. That tab facilitates the break-away of the two boards on the common manufactured panel. Simply bend the individual boards at the connecting tab to break them apart. Use a pair of pliers to remove any pieces left connected.

The section that says Right-Angle Mounting Board will be used with the supplied hardware to allow panel mounting of the IDE44-CF Adapter.

CF-IDE44/2.0mm ADAPTER V.H2
RIGHT-ANGLE MOUNTING BOARD

XEL-CF-][

MPBI

C1

U1-HCT138

U4-HCT245

IDE44

C3

C2

U3-HCT573

U2-HCT00

CC 2017 MYTEK CONTROLS

COMP
SIDE

R1

LED