Iflysims has desinged and produced a range of flight simulation buttons, encoders and circuit boards to replicate the G1000 layout for the purpose of flight simulation. Figure 1 shows Garmin G1000 used in the Cirrus Design Perspective aircraft.

Figure 1 – G1000 Perspecitve PFD

Figure 2 shows the components and subassemblies that can be used to create the G1000 Primary Flight Display (PFD).
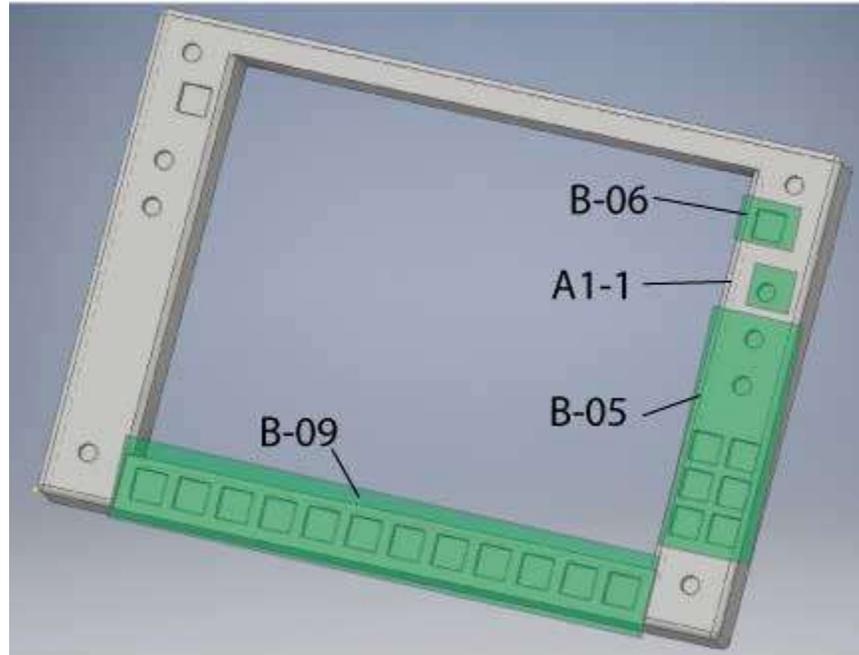

Figure 2 – Layout

B-09   *12 Button Array with Push Button Switches*. Designed to operate as the softbuttons.
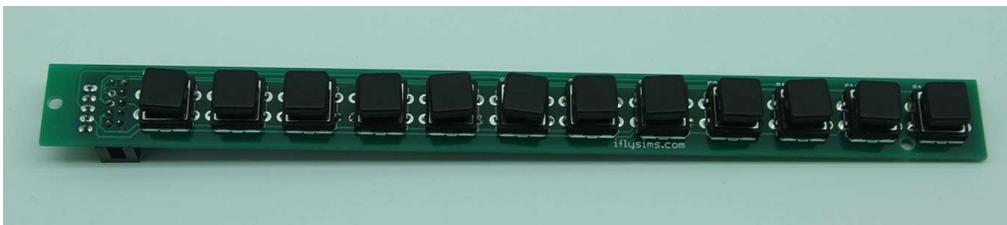

Figure 3 – (B-09) 12 Button Array

B-05   *6 Buttons with 2 Single Rotary Encoders (with push button).* Designed to operate as the 6 buttons.

D	MENU
FP	PROC
CLR	ENT

The 2 Encoders have a push button and can be assigned functions such as RANGE and BARO.
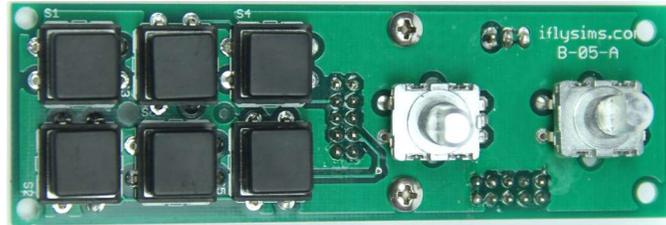

Figure 4 – (B-05) 6 Button/2 Rotary Encoder

A1-1   *Dual Concentric Rotary Encoder* having an Inner and Outer Dial and push button function. Dual Rotary Encoders are used for FMS and COM in this configuration but can be assigned to any function. In the configuration shown above 2 separate A1-1's are required. E37 Encoder, PCB Board, 2 Knobs and Cap is included.

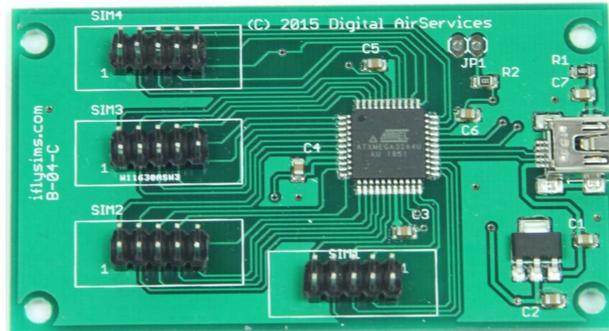Figure 5 – (A1-1) Dual Concentric Rotary Encoder*
ELMA part NO :E37-VT6650-1

The above diagram does not show the knobs and caps. These are included with the A1-1 purchase.

B-06   *Single Button*, this is used for many functions and in this configuration, is used to to alternate the COM frequency selection from Standby to Active.

Figure 6 – (B-06) Single Button with Board

B-04R   *16 Rotary Decoder Board*, used to interface the Rotary Encoders (A1-1) and Single encoders to the Flight Simulator. The Board support 16 separate encoders. Each Dual Rotary Encoder will count as 2 encoders. In this configuration 6 of the 16 encoder chanels are used. The Board connects to the computer running the flight simulator software using USB.
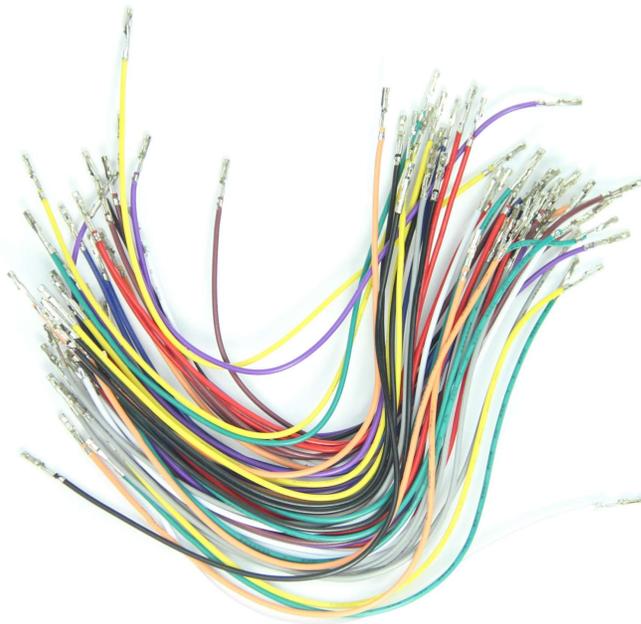

B-04 – USB Interface Board (B-04R and B-04B are identical Boards but contain different Firmware Programs)

B-04B   *32 Button Decoder Board*, used to interface the push buttons to the Flight Simulator. The Board support 32 separate buttons. Each Dual Rotary Encoder push button will connect to this Board. In this configuration 23 of the 32 chanels are used. The Board connects to the computer running the flight simulator software using USB.
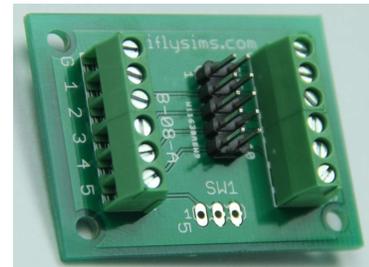
G1000 PFD Build Option (CBO-1)

Qty Required	Part Number	Part Discription
1	B-09	12 Button Array
1	B-05	6 Button / 2 Single Rotary Encoder w Push Button
2	A1-1	E37 Dual Concentric Rotary Encoder w Push Button
1	B-06	Single Push Button
1	B-04R	16 Rotary Decoder with USB Interface
1	B-04B	32 Push Button Decoder with USB Interface

Also recommended wirring connectors and crimp housing connectors. All Boards use 0.1" (2.54mm) pitch connectors. Iflysims stock limited supplies of connections and can be obtained directly or from most electronic stores such as Frys or Radio Shack.

B-08 – 10 Pin Break Out Board

A-0021 - 50 Wire Connector Pack (6" F-F)

Please visit our website iflysims.com or email us at info@iflysims.com for further details and pricing.