

## Baseboard connectivity options

A SwiftModule implementation requires a baseboard which usually provides those connectors required for the interfaces used, as well as any power supply conditioning and other ancillary circuits such as LCD backlight.

Additional capabilities such as LVDS transmitter, USB hub and battery management are often copied from the SwiftKit development baseboard design.

Often-required interfaces which are not included on the module or baseboard include GSM/GPRS modem, Analog-to-Digital Converter (ADC), GPS (Global Positioning System), and CANbus.

Designs for these capabilities, along with daughterboards which plug into the SwiftKit's extension connector, are available as SwiftLibrary components.

The capabilities included on a fully populated SwiftLite board are:



SwiftGSM daughterboard

## SwiftGSM

The SwiftGSM design and daughterboard is based on a Telit GE864 Quad Band modem. Supplied drivers include Dial-up Network (DUN) integration, and a Windows CE 6.0 R2 Cellcore RIL (Radio Interface Layers).



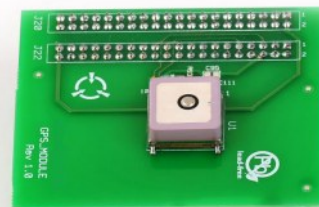
SwiftADC daughterboard

## SwiftADC

The SwiftADC Analog-to-Digital converter design is based on an Analog Devices AD7689 8-channel and 16-bit precision ADC chip which is connected to the Windows CE system via SPI protocol. The SwiftModule host SPI controller can run at up to 13Mbps which means that high sample rates can be supported, up to 250K samples per second.

## SwiftGPS

SwiftGPS provides a Global Positioning System location capability via a Global Top FGPMOP6 66-channel GPS Engine Board with GPS antenna and provides high sensitivity. Position accuracy is less than 3m, and power consumption is less than 37mA while tracking.



SwiftGPS daughterboard