Small Computer Central

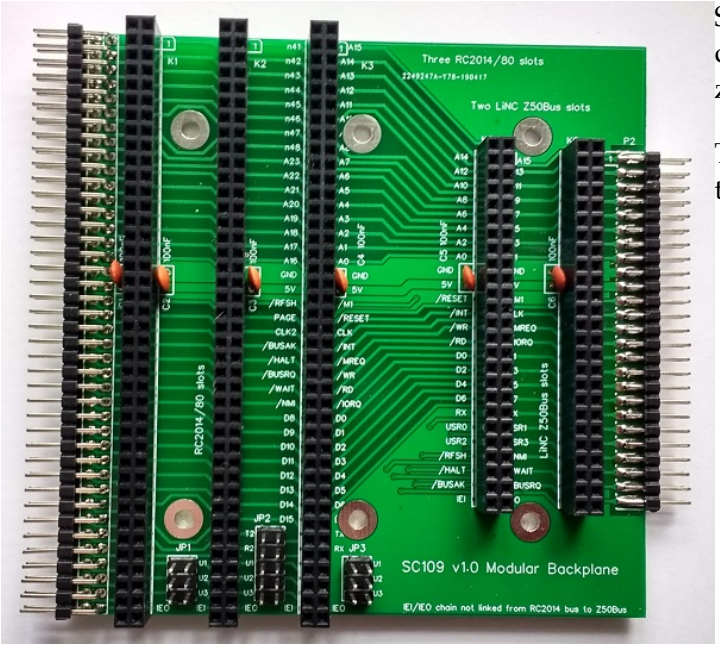
SC126, v1.0, Expansion Cards

SC126 (https://smallcomputercentral.wordpress.com/sc126-z180-motherboard-rc2014/) has three 80-pin expansion sockets which are an extended RC2014 bus, known as Backplane-80 (or BP80). The specification for this bus can be found here (https://smallcomputercentral.wordpress.com/documentation/specification-rc2014-bus/).

All three expansion sockets can be used to connect RC2014 style expansion modules. Two of the sockets are vertical and one is horizontal. The horizontal socket allows a modular backplane to be connected and thus extend the bus with more expansion sockets.

Below are details of some of the expansion cards that work with SC126.

Backplanes

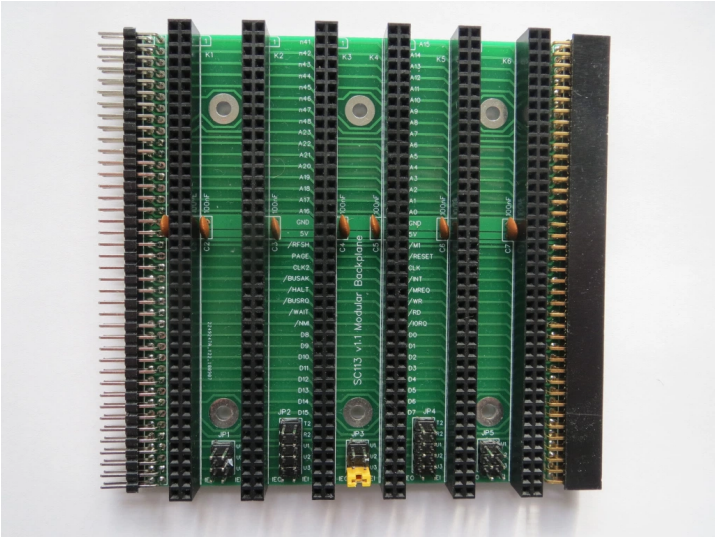


SC109 modular backplane (https://smallcomputer-central.wordpress.com/sc109-module-backplane-z50bus-rc2014/)

This backplane section adds three BP80 bus sockets and two Z50Bus sockets.

SC113 modular backplane (https://smallcomputer-central.wordpress.com/sc113-modular-backplane-rc2014/)

This backplane section adds seven BP80 bus sockets.

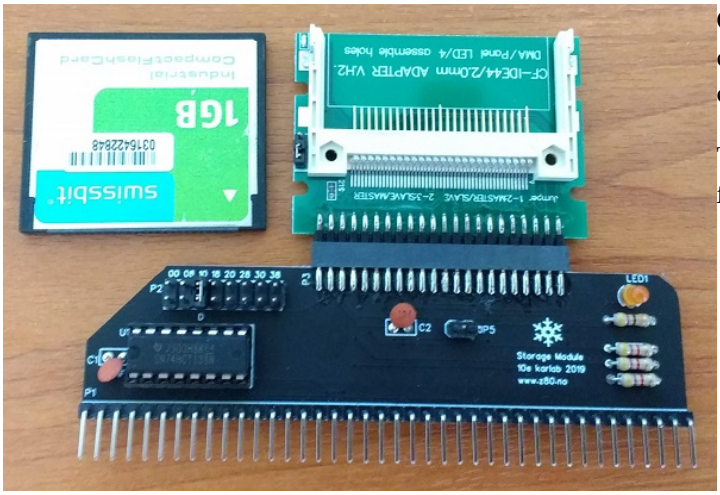


Compact Flash

Compact Flash module 10d (https://smallcomputer-central.wordpress.com/third-party-products/karls-compact-flash-module-10d/)

This module enables a Compact Flash card to be used for storage.

I have not tested this module but it should work.

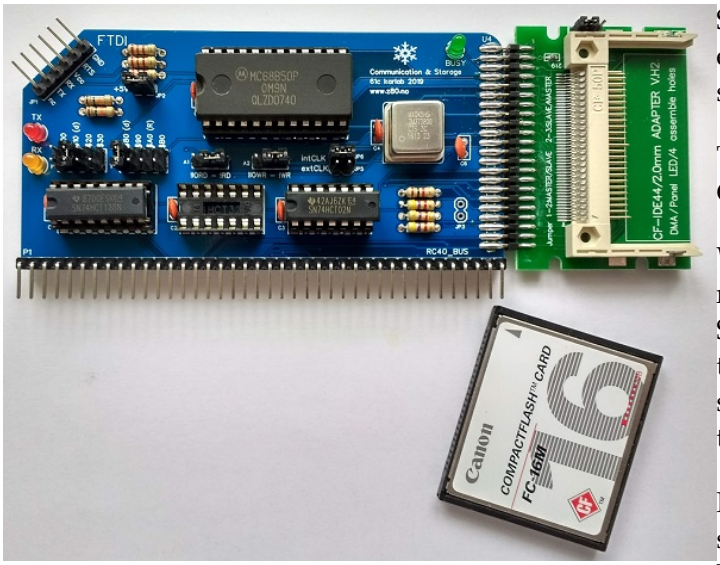


Compact Flash module 10e (https://smallcomputer-central.wordpress.com/third-party-products/karls-compact-flash-module-10e/).

This module enables a Compact Flash card to be used for storage.

RC2014 Compact Flash module (https://www.tindie.-com/products/semachthemonkey/compact-flash-module-for-cpm-rc2014-computer/)

This module enables a Compact Flash card to be used for storage.



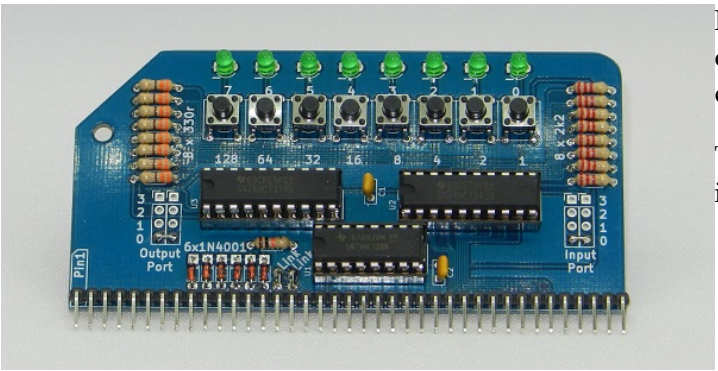
Serial and storage module #61c (https://smallcomputercentral.wordpress.com/third-party-products/karls-serial-and-storage-module/)

This module provides a serial port and also enables a Compact Flash card to be used for storage.

WARNING: This module's TX and RX signals are connected to bus pins 35 and 36. This conflicts with SC126's TX and RX signals which are also connected to these pins. It is therefore necessary to isolate them in some way. One option is to remove pins 35 and 36 on the bus header of this module.

I have not tested the serial port with SC126 but it should work if the TX and RX pins are isolated. RomWBW supports the 68B50 ACIA and the Compact Flash card. SCM S6 does not currently include support.

Digital I/O

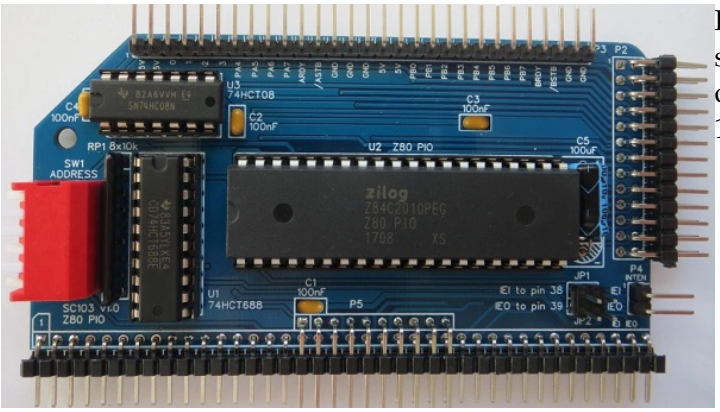


RC2014 digital I/O module (https://smallcomputercentral.wordpress.com/third-party-products/rc2014-digital-i-o-module/)

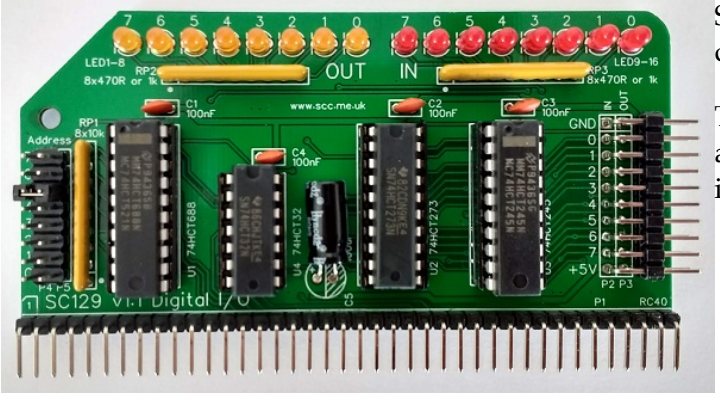
The module has 8 LED outputs and 8 push button inputs.

SC103 Z80 PIO module (https://smallcomputercentral.wordpress.com/sc103-z80-pio-module-rc2014/)

The module provides full access to a Z80 PIO.



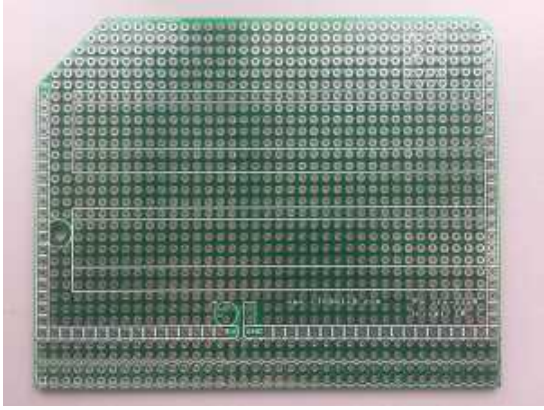
I have not tested interrupts with SC126 but otherwise it seems to work okay. One word of warning is that some of the PIO's specified bus timings are not met by the 18MHz Z180 CPU on SC126.



SC129 digital I/O module (https://smallcomputer-central.wordpress.com/sc129-digital-i-o-rc2014/)

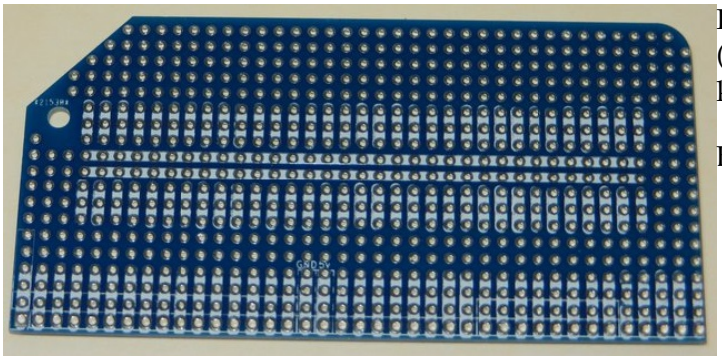
The module enables external interfacing via 8 inputs and 8 outputs. Each input and output has an LED indicator.

Prototyping



DTRONICS prototype module (https://www.tindie.-com/products/DTronixs/prototype-boardpcb-for-the-rc2014-bus/)

Build your own prototype modules on this PCB.



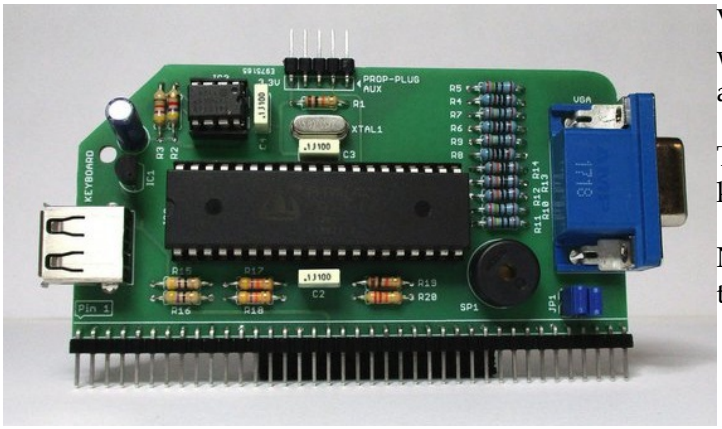
RC2014 prototyping module (https://www.tindie.com/products/semachthemon-key/prototype-pcb-for-rc2014/)

Build your own prototype modules on this PCB.

SC115 breakout module (https://smallcomputer-central.wordpress.com/sc115-breakout-rc2014/)

This module allows all the bus signals to be easily connected to solderless breadboards. It also includes very flexible address decoding.

Video



VGA terminal module (https://smallcomputercentral.wordpress.com/third-party-products/marcos-vga-serial-terminal-module/)

This module provides a VGA terminal display and USB keyboard input.

Note that you need a version of RomWBW configured to use 115200 baud serial.