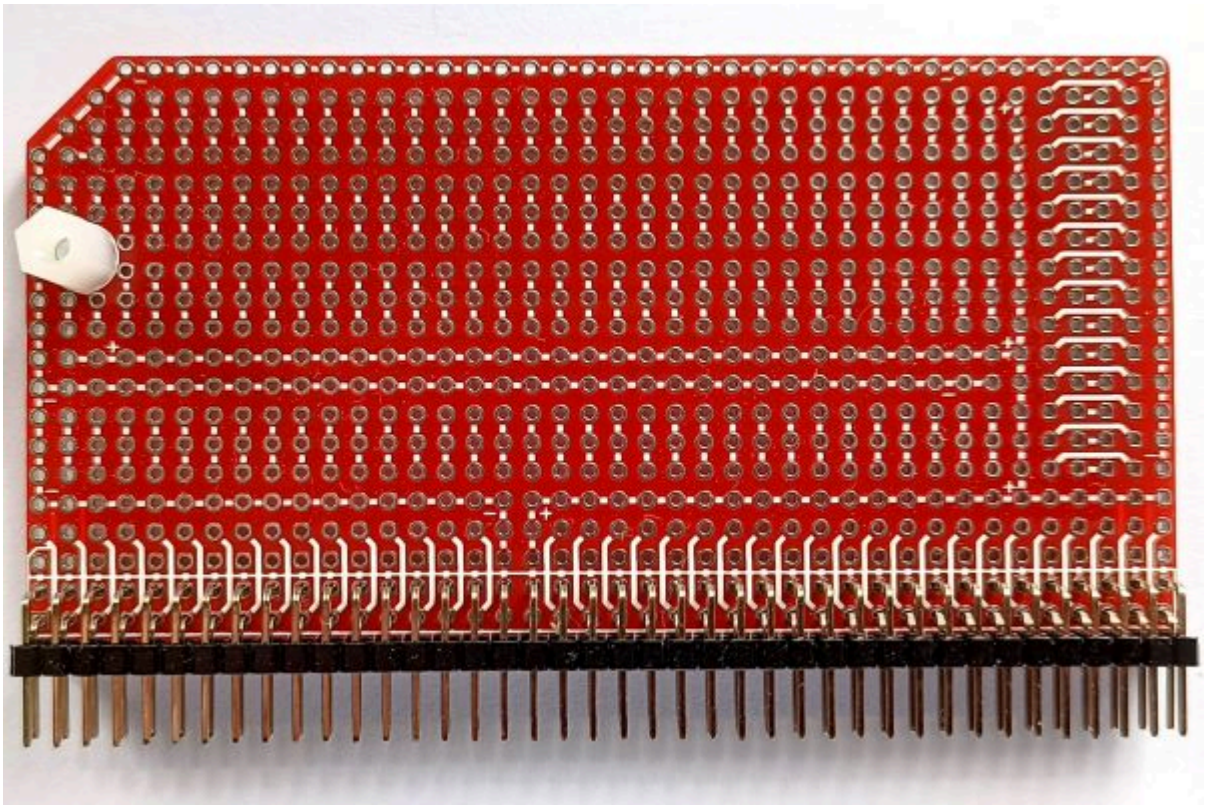
Small Computer Central

SC733 – RCBus Prototyping Module

SC733 is a prototyping module designed for the RCBus.



- SC733 – Assembly guide
- SC733 – Compatibility
- SC733 – Parts list
- SC733 – Printed circuit board
- SC733 – User guide
- SC700 series information (https://smallcomputercentral.com/rcbus/sc700-series/)
- SC700 series support (https://smallcomputercentral.com/support/)

Downloads

- SC733, v1.0, Kit contents sheet (PDF) (https://smallcomputercentral.com/wp-content/uploads/2024/05/sc733-kit-contents_v1.0.0_2024-04-24.pdf)
- SC733, v1.0, PCB design files (OSHWLab) (https://oshwlab.com/sccousins/sc711-v1-0-prototype-for-rcbus_copy_copy)

- SC733, v1.0, Gerber files (ZIP) (https://drive.google.com/file/d/18VlQFXy-w6DODB5WfNmRCfdCONbeMc6T/view?usp=drive_link)

Errata

Nothing known

Suppliers

Kits	***Website***	***From***	***Currency***
Small Computers Direct	SCDirect (https://small-computers-direct.square.site/s/search?q=sc733)	UK	GBP
Stephen C Cousins	Tindie (https://www.tindie.com/search/?q=sc733)	UK	USD
Small Computer Central	Lectronz (https://lectronz.com/products/search?q=sc733)	UK	Euro/USD
PCBs	***Website***	***From***	***Currency***
Small Computers Direct	(https://small-computers-direct.square.site/s/search?q=sc733)SCDirect (https://small-computers-direct.square.site/s/search?q=sc733)	UK	GBP
Stephen C Cousins	Tindie (https://www.tindie.com/products/tindiescx/picknmix-boards-for-rcbus-80pin/)	UK	USD
Small Computer Central	Lectronz (https://lectronz.com/products/pick-n-mix-boards-for-rcbus-80pin)	UK	Euro/USD
Assembled and Tested	***Website***	***From***	***Currency***
Not available			
Components			
See parts list			

Small Computers Direct does not collect VAT for EU countries
Tindie does not collect VAT for EU countries
Lectronz does collect EU VAT for orders up to 150 EUR

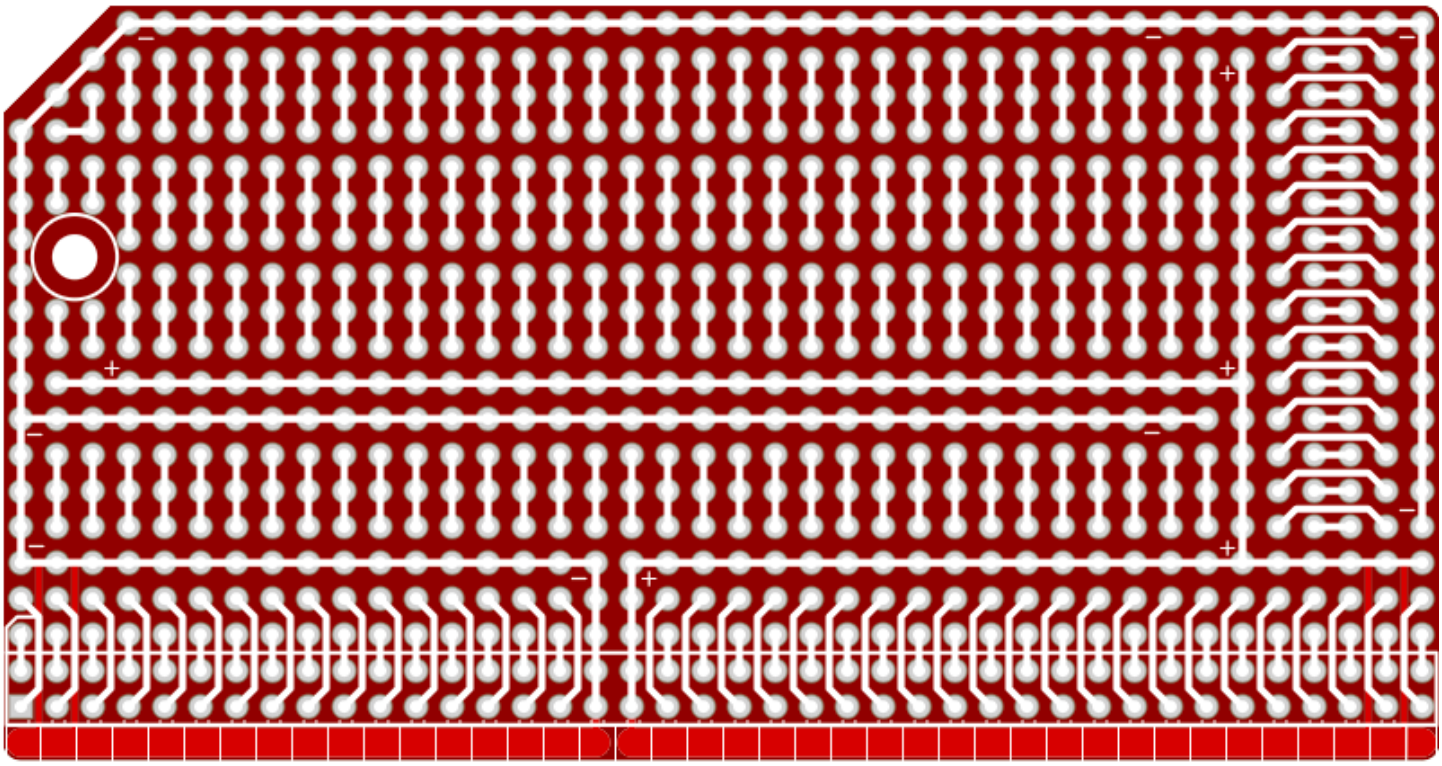
Parts List

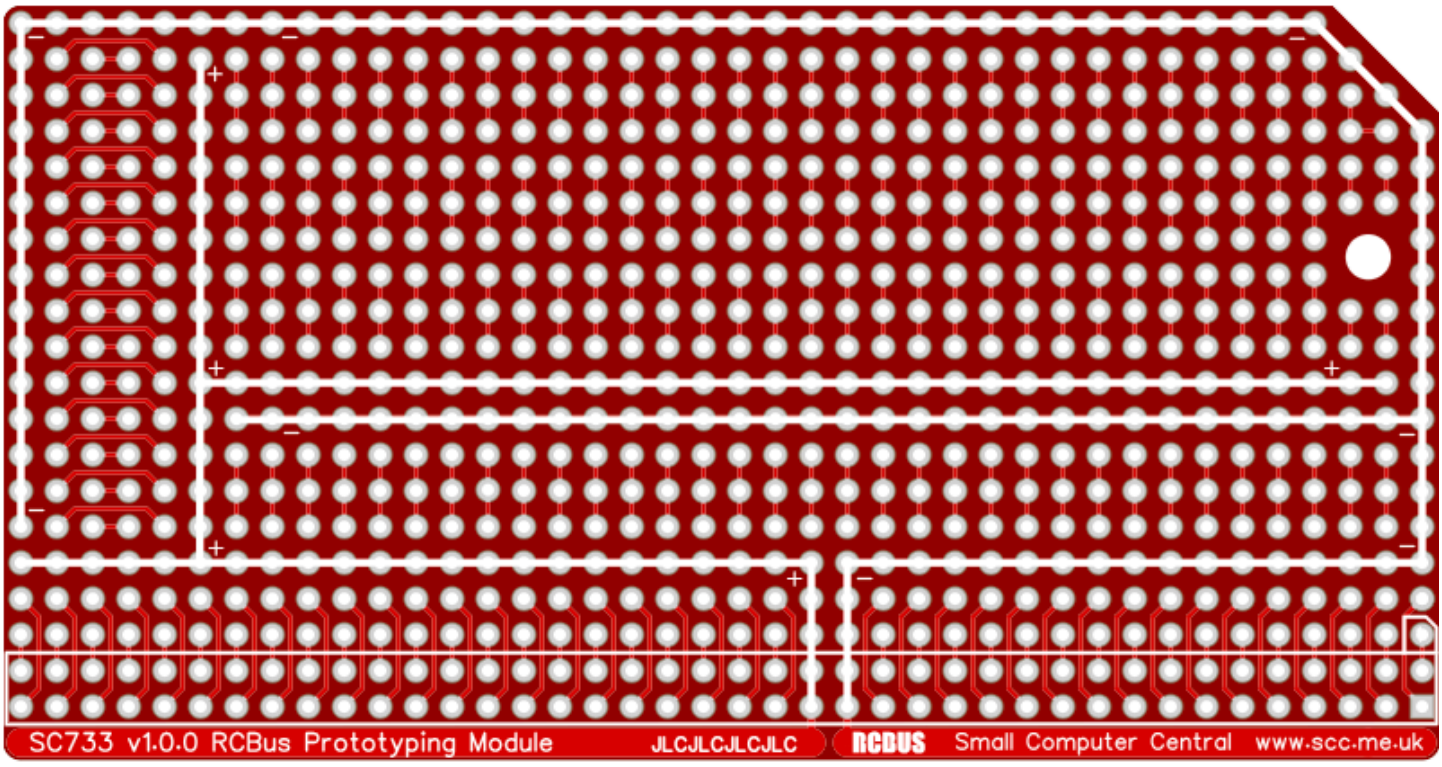
Reference	***Qty***	***Component***

PCB	1	SC733, v1.0, PCB
P1	1	Header, male, 2 row x 40 pin, angled
Screw (for spacer)	1	Machine screw, 6mm, M3
Spacer	1	Spacer, 10mm, M3, nylon

Component details and sourcing (https://smallcomputercentral.com/components/)

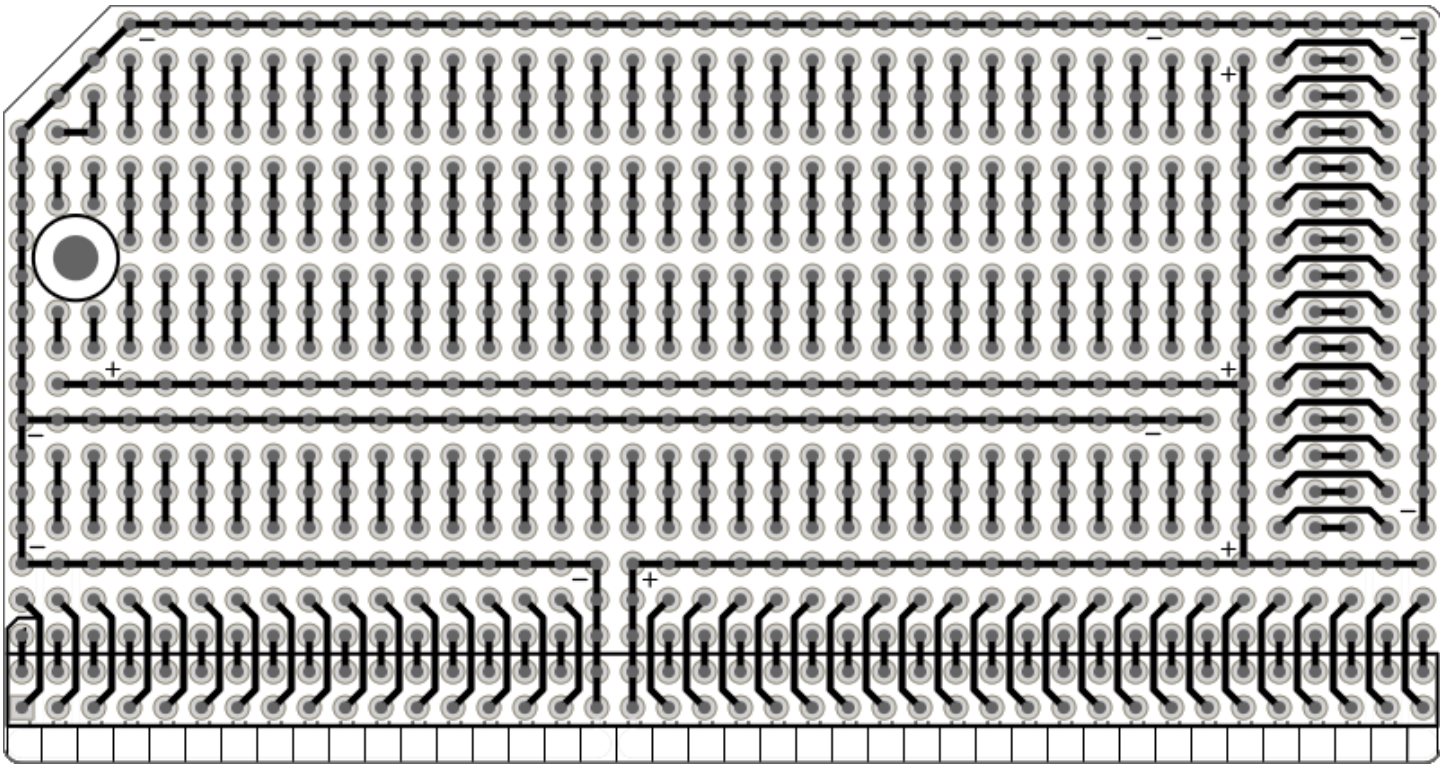
Printed Circuit Board





User Guide

The illustration below shows the connections built into the PCB. These are designed to allow both narrow and wide dual-in-line ICs and also 0.1″ pitch connectors on the back (right) edge of the module.



Input/output port functions

I/O Address	***Read***	***Write***
none	n/a	n/a

Jumper options

Jumper	***Function***
none	n/a

Assembly Guide

Below is the suggested order of assembly. A general guide to assembling circuit boards can be found here (https://smallcomputercentral.com/assembly-guide/).

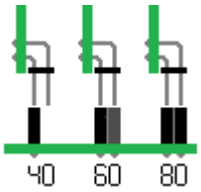
1. Bus header P1
   Make sure the pins are parallel to the PCB so that the board is vertical when it is fitted into a backplane socket
2. Fit the nylon spacer in the mounting hole

Compatibility

This module conforms fully to the RCBus specification v1.0 (https://smallcomputercentral.com/rcbus/) and thus supports: RCBus-2014, RCBus-Z80, RCBus-68xx, RCBus-9995.

The RCBus specification includes RCBus-2014 (both RC2014 standard 40-pin bus and RC2014 enhanced 60-pin bus) and also the full 80-pin RCBus. The 80-pin RCBus provides support for advanced Z80 features, such as the interrupt daisy-chain, as well as support for other processor families.

The table below indicates electrical compatibility with each backplane type (40, 60 and 80 pin)



Backplane	?	Compatibility notes
RCBus 80-pin	✔	Fully supported
RCBus 60-pin (RC2014 enhanced)	✔	Limitations: Only 60-pin bus signals available
RCBus 40-pin (RC2014 standard)	✔	Limitations: Only 40-pin bus signals available

Notes

- This product is designed for hobby use and is not suitable for industrial, commercial, or safety-critical applications.
- The product contains small parts and is not suitable for young children.