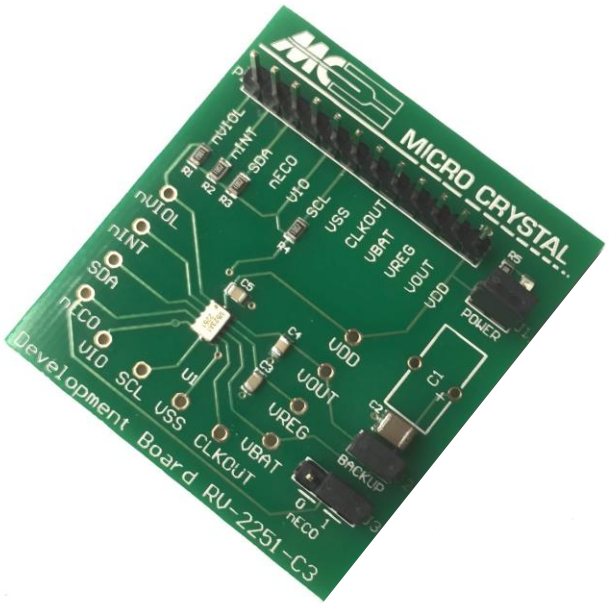
MICRO CRYSTAL SWITZERLAND

RV-2251-C3
Development Board

DEVELOPMENT BOARD



RV-2251-C3

Low-Power Real Time Clock / Calendar Module with Power back-up facility

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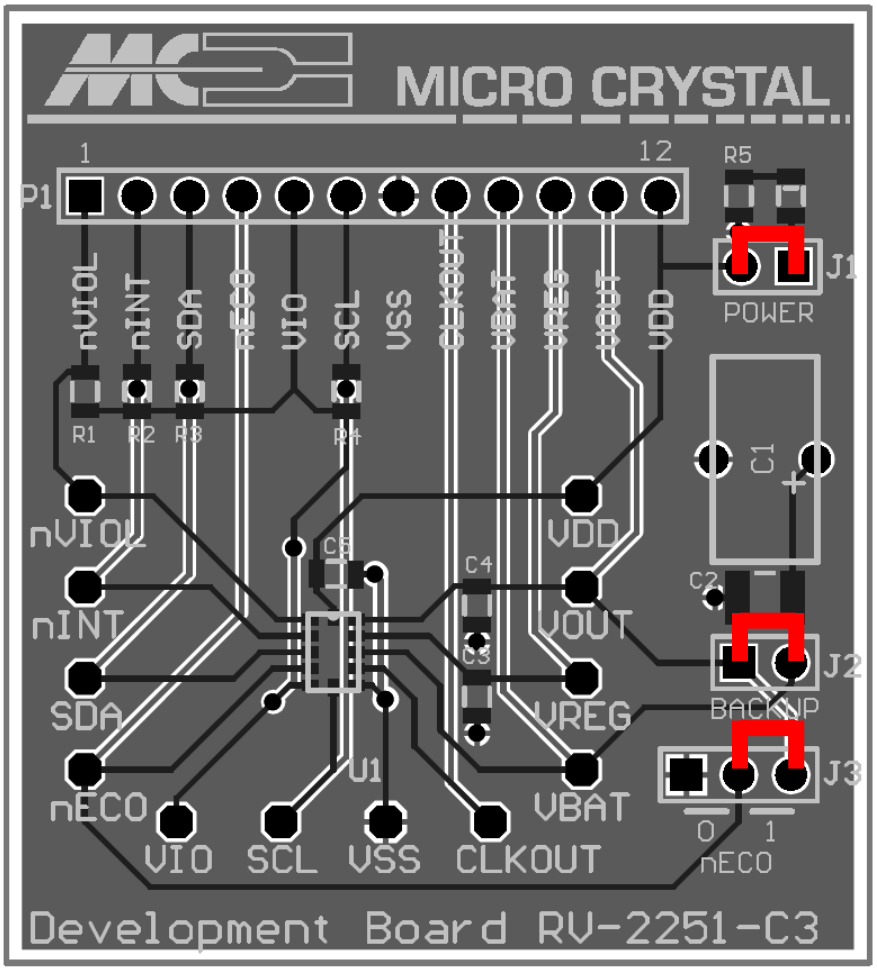
RV-2251-C3

The RV-2251-C3 is soldered onto the Development Board.
Every pin is accessible at test pins 1 – 12.

The following passive components are already soldered on the Board:

C1	nc	Option for SuperCap
C2	100 µF	Back-up capacitor
C3…5	100 nF	Buffer capacitor
LED1	green	To monitor V_{DD}, unplug Jumper 1 to save current
R1	10 kΩ	Pull-up resistor nVOL
R2	10 kΩ	Pull-up resistor INT
R3	10 kΩ	Pull-up resistor SDA
R4	10 kΩ	Pull-up resistor SCL
R5	330 Ω	current limiting resistor for LED
U1	RV-2251-C3	RTC Module

DEVELOPMENT BOARD



JUMPER 1

Enabling Power LED

JUMPER 2

V_{OUT} - V_{BAT}

JUMPER 3

nECO

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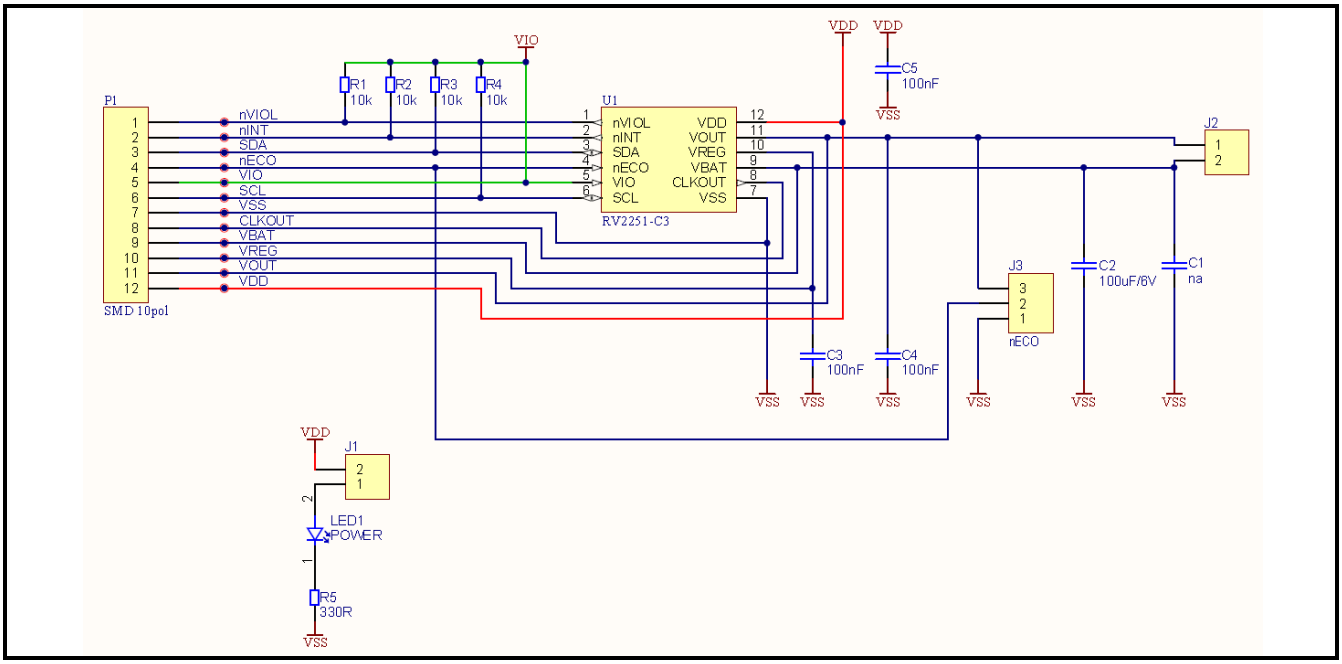
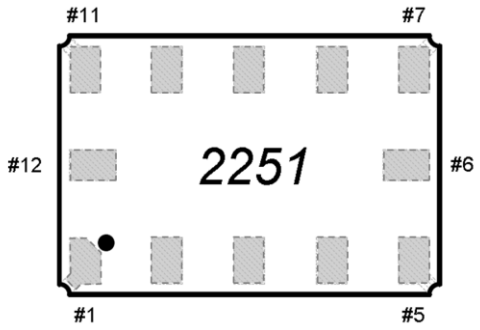
SCHEMATICS



PINOUT RV-2251-C3



top view

# 1	$\overline{V_{IOL}}$	# 12	V_{DD}
# 2	$\overline{INT}$	# 11	V_{OUT}
# 3	SDA	# 10	$\overline{V_{REG}}$
# 4	$\overline{ECO}$	# 9	V_{BAT}
# 5	V_{IO}	# 8	CLKOUT
# 6	SCL	# 7	V_{SS}

PIN DESCRIPTION

Symbol	Pin #	Description
$\overline{V_{IOL}}$	1	Peripheral Supply Monitoring Result Output; open-drain; active LOW
$\overline{INT}$	2	Interrupt Output; open-drain; active LOW
SDA	3	I^2C Serial Data Input-Output
$\overline{ECO}$	4	Input to select Oscillator mode. If ECO is HIGH, ECO mode is off. If ECO is tied to Ground, ECO mode is on. This pin must not be left floating or the RTC may consume higher current
V_{IO}	5	Peripheral Supply Voltage Input (for I^2C interface and CLKOUT)
SCL	6	I^2C Serial Clock Input; requires pull-up resistor
V_{SS}	7	Ground
CLKOUT	8	32.768 kHz Clock Output; push-pull. Voltage of high level is equal to V_{IO}. Output always active
V_{BAT}	9	Backup Power Supply Input
$\overline{V_{REG}}$	10	Voltage regulator output. 3.0 V if $V_{DD} \geq 3.3$ V. Connect a 0.1 µF capacitor between V_{REG} and V_{SS}
V_{OUT}	11	Internal Supply Voltage Output or Input. V_{OUT} is the switch-over output of V_{DD} and V_{BAT}
V_{DD}	12	Main Power Supply Input

Datasheet and Application-Manual are available for download under: www.microcrystal.com