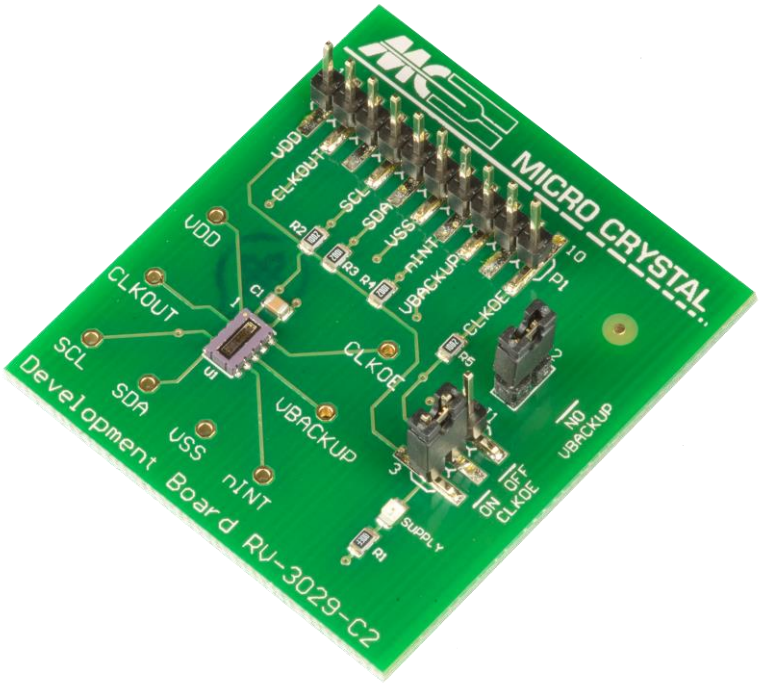
MICRO CRYSTAL SWITZERLAND

RV-3029-C2
Development Board

DEVELOPMENT BOARD



RV-3029-C2

Temperature Compensated Real Time Clock / Calendar Module

DATE:	April 2016	Revision No.: 2

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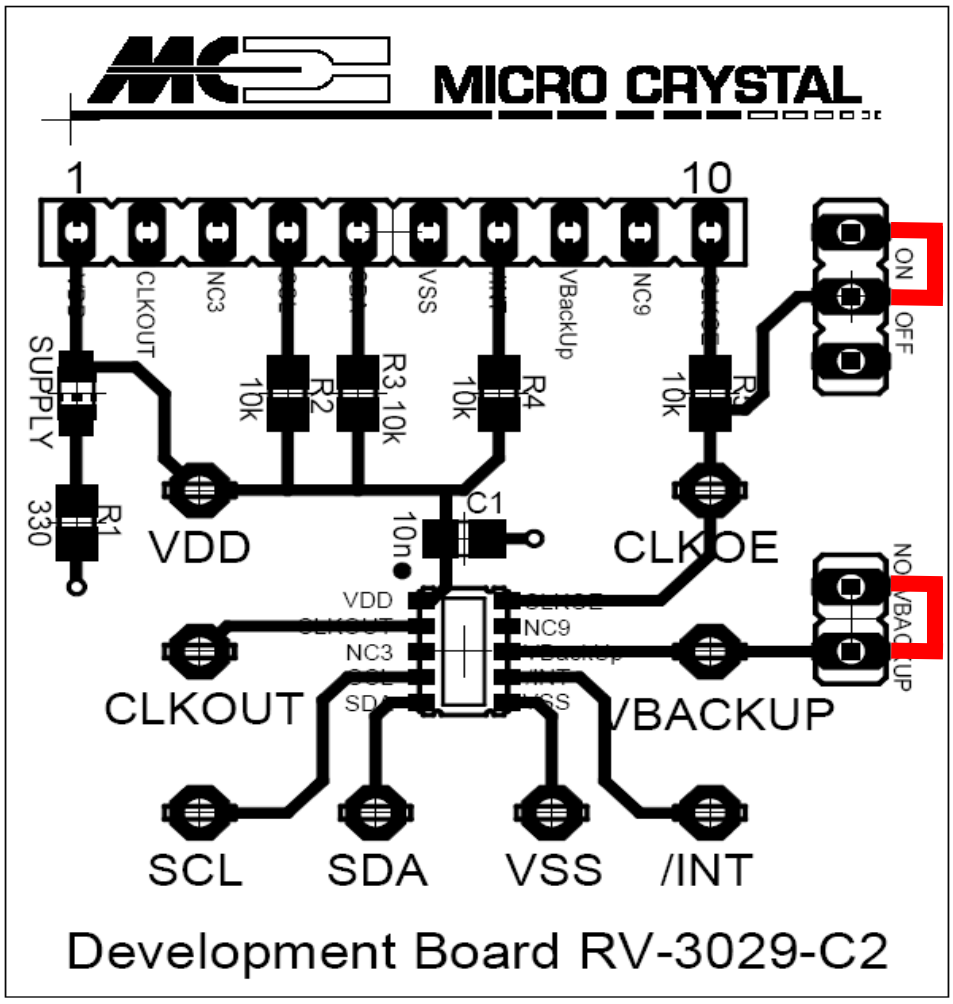
RV-3029-C2

The RV-3029-C2 is soldered onto the Development Board.
Every pin is either accessible at test pins 1 – 10 or at the test vias situated around the device.

The following passive components are already soldered on the Board:

C1	10 nF	Decoupling capacitor between V_{SS} and V_{DD}
R1	330 Ω	current limiting resistor for LED
LED	green	Supply, current consumption of the LED has to be considered
R2	10 kΩ	Pull-up resistor SCL to V_{DD}
R3	10 kΩ	Pull-up resistor SDA to V_{DD}
R4	10 kΩ	Pull-up resistor INT to V_{DD}
R5	10 kΩ	Protection resistor to prevent short-circuit between external CLKOE signal and Jumper.

DEVELOPMENT BOARD



JUMPER 1

CLKOE = HIGH

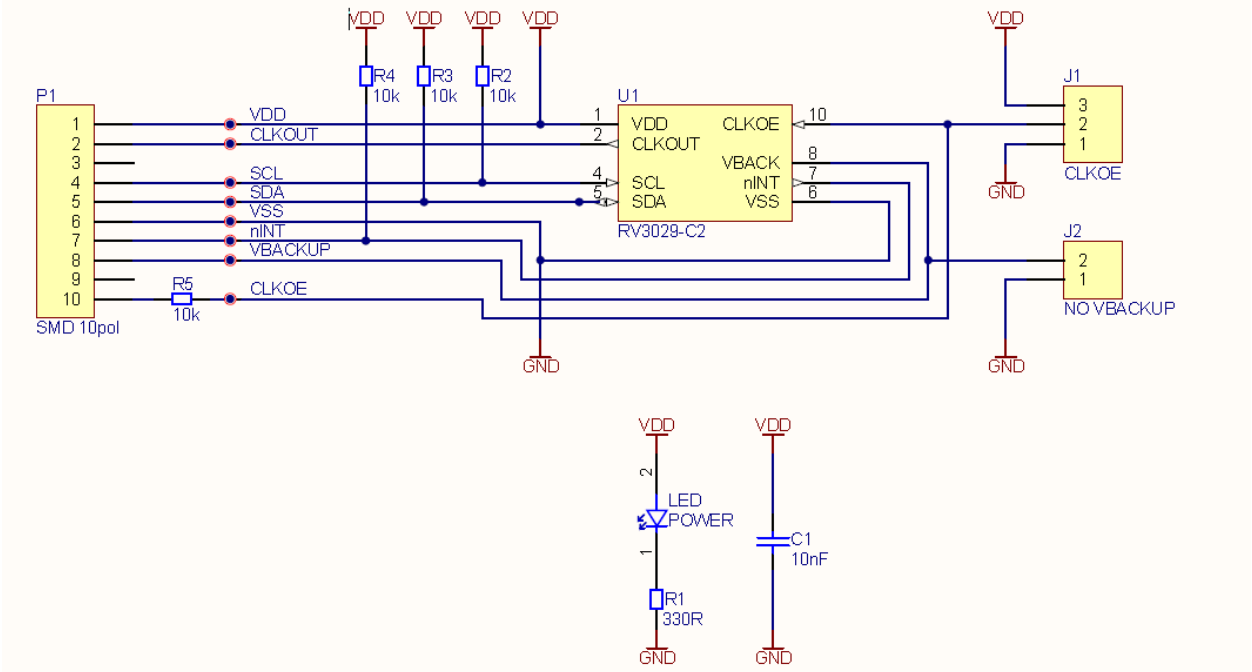
CLKOE = LOW

JUMPER 2

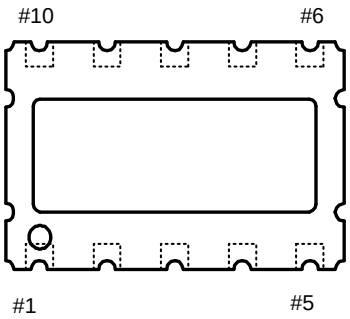
V_{BAT} = GND

Development Board RV-3029-C2

SCHEMATICS



PINOUT RV-3029-C2



# 1	V_{DD}	# 10	CLKOE
# 2	CLKOUT	# 9	N.C.
# 3	SCL	# 8	$\overline{INT}$
# 4	SDI	# 7	CE
# 5	SDO	# 6	V_{SS}

PIN DESCRIPTION

Symbol	Pin #	Description
V_{DD}	1	Positive supply voltage; positive or negative steps in supply voltage may affect oscillator performance, recommend 10 nF decoupling capacitor close to device
CLKOUT	2	Clock Output pin. CLKOUT or $\overline{INT}$ function can be selected.(Control_1; bit7; CLK/INT) CLKOUT output push-pull / $\overline{INT}$ function open-drain requiring pull-up resistor
NC	3	Not Connected; internally used for test, do not connect other signals then ground.
SCL	4	Serial Clock Input pin; requires pull-up resistor
SDA	5	Serial Data Input-Output pin; open-drain; requires pull-up resistor
V_{SS}	6	Ground
$\overline{INT}$	7	Interrupt Output pin; open-drain; active LOW
V_{BACKUP}	8	Backup Supply Voltage; tie to GND when not using backup supply voltage.
NC	9	Not Connected; internally used for test, do not connect other signals then ground.
CLKOE	10	CLKOUT enable/disable pin; enable is active HIGH; tie to GND when not using CLKOUT

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