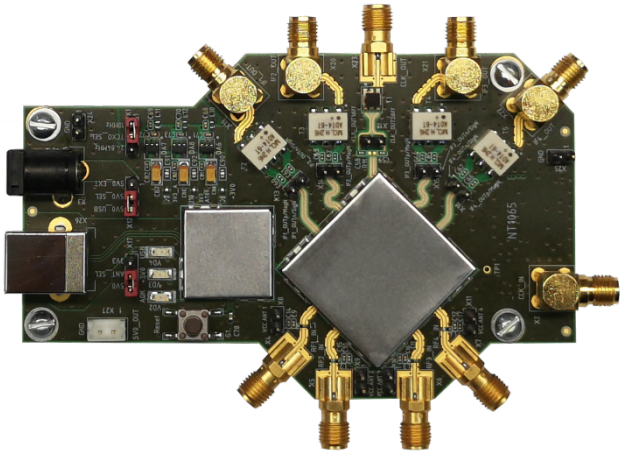
1 OVERVIEW

NT1065_EVK2 is an evaluation platform for performance and capabilities demonstration of NT1065: 4-channel GPS/GLONASS/Galileo/BeiDou/NavIC/QZSS L1, L2, L3, L5, E1, E5a, E5b, E6, B1, B2, B3 band RF Front-End IC. It is suitable the most for in-lab examining with measurement equipment like spectrum analyzer, oscilloscope, network analyzer and etc, but also it has connectors for wiring to external development platforms.

2 KEY FEATURES

- IO ports:
  - Every channel individual RF input with active antenna supply option
  - Every channel IF output ready to connect either as digital 2-bit CMOS or differential analog signal (single ended is also available as assembly option)
  - External reference frequency input (TCXO)
  - CLK output ready to connect either as CMOS or LVDS (single-ended sinewave is also available as assembly option)
  - Embedded USB to SPI adapter for NT1065 registers configuration
- On-board reference frequency sources:
  - 10 MHz 0.28ppm high-stability TCXO
  - 24.84 MHz 1.5ppm TCXO
- Additional modules:
  - 1-to-4 RF splitter
  - 2-to-4 RF splitter
  - 4-channel RF preselector
  - 1-to-5 RF splitter
- Comprehensive software and manual:
  - NT1065 EVK2 user manual
  - GUI for NT1065 registers access (Windows 7/8/8.1/10 and Linux Ubuntu 16.04 compatible)
  - Configuration examples
  - NT1065 datasheet
  - Database of reference design



3 STRUCTURE

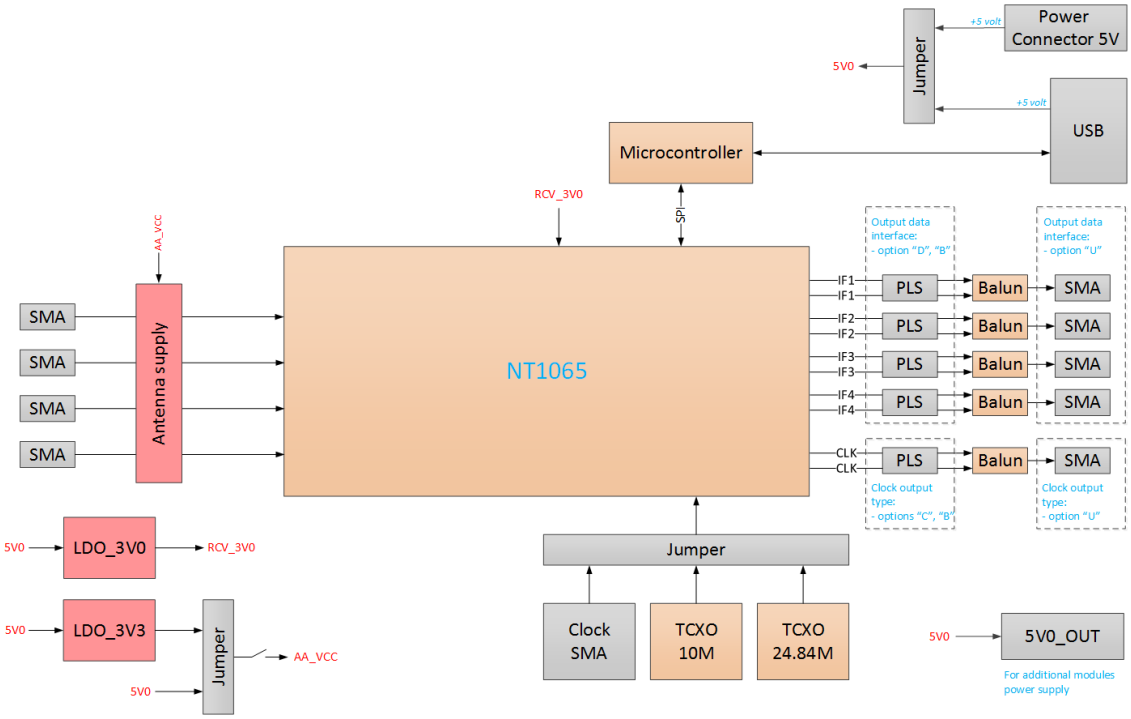


Figure 1: Block diagram

4 ORDERING INFORMATION

B1065E2 – X X Y Y - Y [1]

Additional modules[2]:

X	-	No modules
A	-	1-to-4 RF splitter
B	-	2-to-4 RF splitter
C	-	4-channel RF preselector
D	-	1-to-5 RF splitter

Clock output type:

C	-	CMOS output
U	-	LVDS unbalanced output
B	-	LVDS balanced output

Output data interface:

D	-	Digital 2-bit ADC output
U	-	Analog unbalanced output
B	-	Analog balanced output

Frequency range for channels #3 and #4:

1	-	L1: 1550 – 1620 MHz
2	-	L2, L3, L5: 1150 – 1300 MHz

Frequency range for channels #1 and #2:

1	-	L1: 1550 – 1620 MHz
2	-	L2, L3, L5: 1150 – 1300 MHz

[1] Assembly options B1065E2–12UU and B1065E2–12DC are in stock, lead time – 1-2 week(s). Other options are available upon request, lead time – 1-2 month(s).

[2] If several additional modules are required, please, add corresponding symbols consequently, e.g. B1065E2–12UU–AB. Refer to documents NT1065_Additional modules_vx.xx.pdf and RF_Splitter_1_to_5_vx.x.pdf for description and assembly options.