1. OVERVIEW

NT1068.2_EVK is an evaluation platform for performance and capabilities demonstration of NT1068.2: 4-channel GPS/GLONASS/Galileo/BeiDou/NavIC/QZSS S, 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.
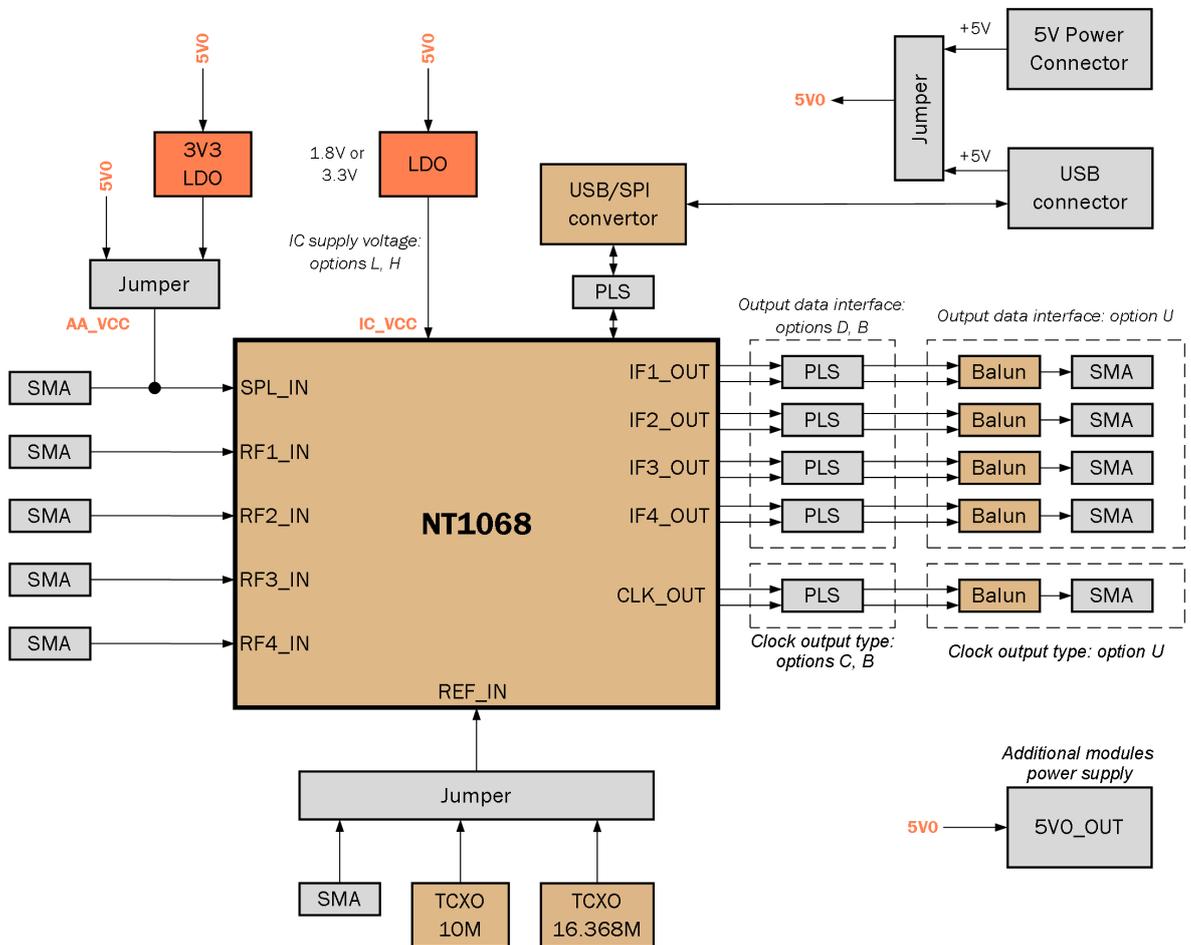
2. KEY FEATURES

- IO ports:
  - RF splitter input with active antenna supply option
  - Every channel individual RF input
  - Every channel IF output ready to connect either as digital 2-bit CMOS/LVDS or analog differential signal (single-ended signal is also available as assembly option)
  - External reference frequency input (TCXO)
  - CLK output ready to connect either as CMOS, differential or LVDS (single-ended sinewave is also available as assembly option)
  - Embedded USB to SPI adapter for NT1068.2 registers configuration
- On-board reference frequency sources:
  - 10 MHz TCXO
  - 16.368 MHz TCXO
- Additional modules:
  - 1-to-4 RF splitter
  - 2-to-4 RF splitter
  - 4-channel RF preselector
  - 1-to-5 RF splitter (SPL15-45514 or SPL15-465X5 recommended)
- Comprehensive software and manual:
  - NT1068.2 datasheet
  - NT1068.2_EVK user manual
  - GUI for NT1068.2 registers access (Windows 7/8/8.1/10 and later compatible; Linux Ubuntu 18.04 and later compatible)
  - NT1068.2 configuration examples
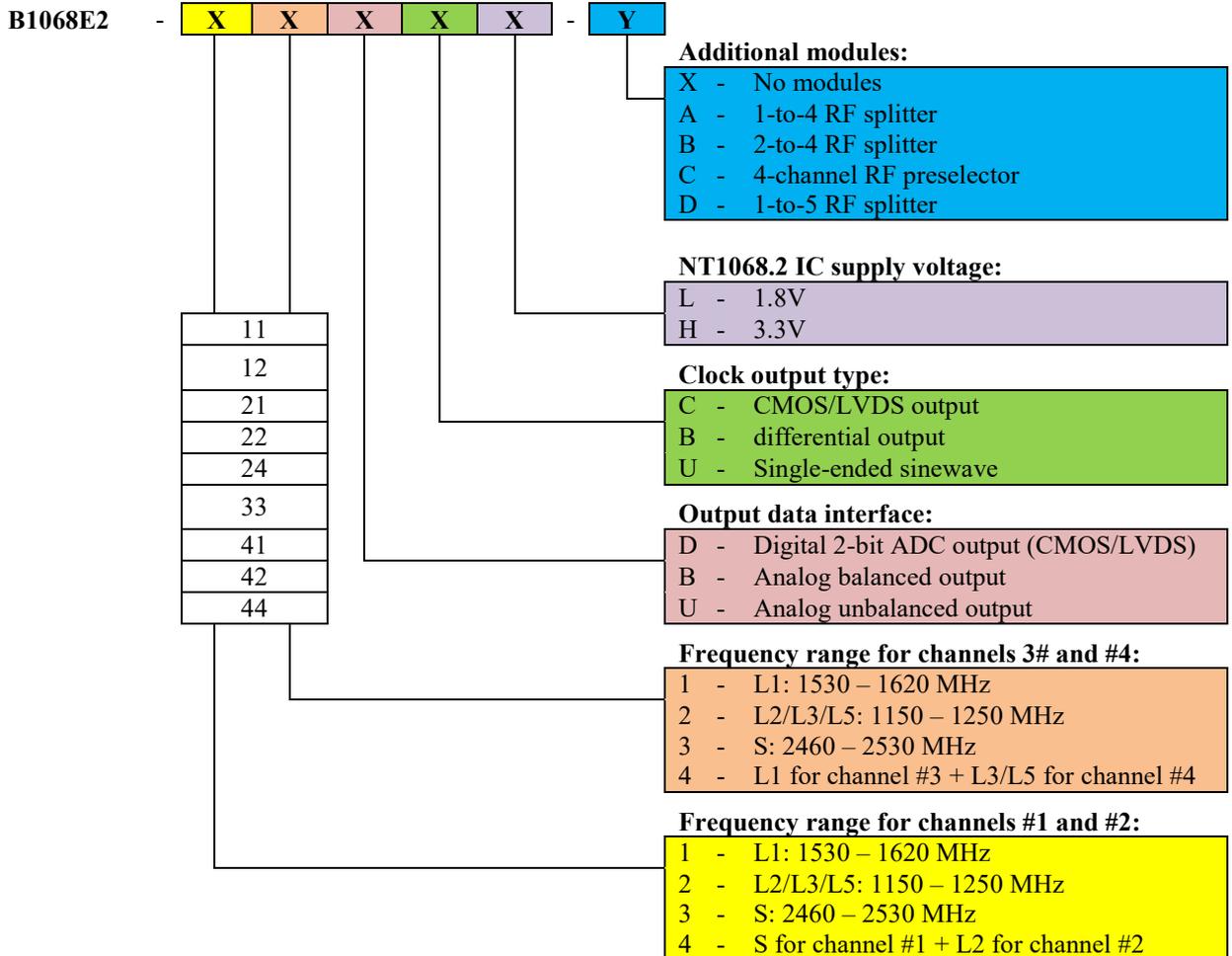 - Database of reference design

3. PACKAGE CONTENT

- PCB NT1068.2_EVK_V1 (demo board NT1068.2)
- Power supply cable
- Link to online documentation and GUI

4. STRUCTURE

5. ORDERING INFORMATION

B1068E2 - X X X X X - Y

Additional modules:

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

NT1068.2 IC supply voltage:

L	-	1.8V
H	-	3.3V

Clock output type:

C	-	CMOS/LVDS output
B	-	differential output
U	-	Single-ended sinewave

Output data interface:

D	-	Digital 2-bit ADC output (CMOS/LVDS)
B	-	Analog balanced output
U	-	Analog unbalanced output

Frequency range for channels 3# and #4:

1	-	L1: 1530 – 1620 MHz
2	-	L2/L3/L5: 1150 – 1250 MHz
3	-	S: 2460 – 2530 MHz
4	-	L1 for channel #3 + L3/L5 for channel #4

Frequency range for channels #1 and #2:

1	-	L1: 1530 – 1620 MHz
2	-	L2/L3/L5: 1150 – 1250 MHz
3	-	S: 2460 – 2530 MHz
4	-	S for channel #1 + L2 for channel #2

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If several additional modules are required, please, add corresponding symbols consequently, e.g. B1068E2–44UUH–AB. Refer to documents NT1065_Additional modules_vx.xx.pdf and document RF_Splitter_1_to_5_vx.x.pdf for description and assembly options.