# 1 OVERVIEW

NT1065_USB3 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 includes USB3 data converter thus allowing an user to process captured satellite signals on a PC. Data rate is configurable and may be as high as 800 Mbps (200 Mbps per channel).

2 KEY FEATURES

- IO ports:
    - Every channel individual RF input
    - External reference frequency input (TCXO)
    - USB3.0 output
- On-board reference frequency sources:
    - 10 MHz 0.28ppm high-stability 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:
    - GUI for NT1065 registers access (Windows 7/8/8.1/10 and Linux Ubuntu 16.04 compatible)
    - GUI for USB3 data capture
    - Configuration examples
    - Complete NT1065 user guide
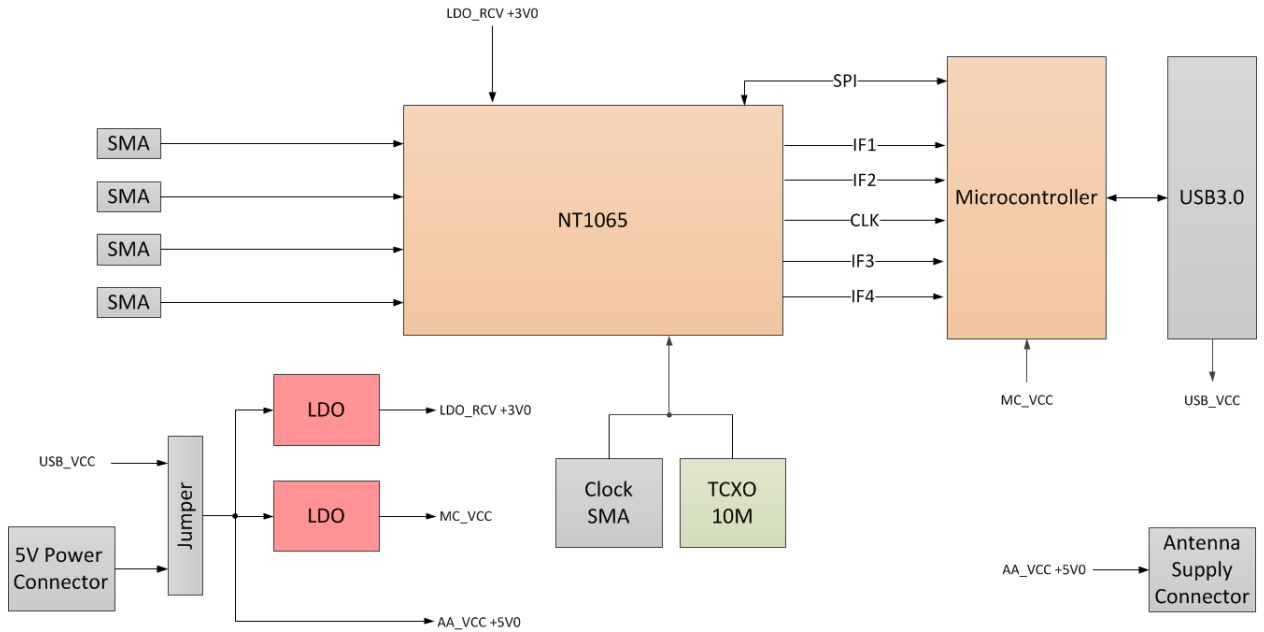   - Database of reference design
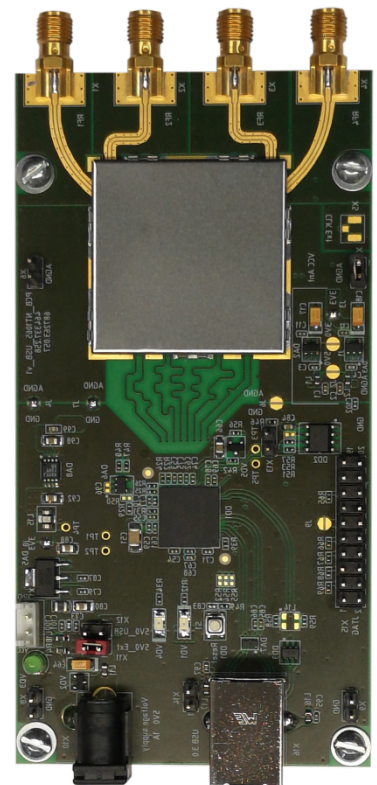
3 STRUCTURE

Figure 1: Block diagram

4 ORDERING INFORMATION

B1065U1 – X X – 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

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

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[1] Assembly option B1065U1-12 is 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. B1065U1–12–AB. Refer to documents NT1065_Additional modules_vx.xx.pdf and RF_Splitter_1_to_5_vx.x.pdf for description and assembly options.