

# 1 GNSS\_S14

## 1.1 OVERVIEW

GNSS\_S14 is 1-to-4 active splitter with L1, L2, L3 and L5 subbands RF preselection. It is intended to be used with NT1065 demo boards NT1065\_EVK, NT1065\_FMC, NT1065\_USB3 if passive or low gain antennas (cable losses included) should be plugged in. Paired solution provides less than 1dB of total noise figure and more than 35dB of outband RF rejection. Every channel can be assembled to pass through any of available GNSS bands independently, however, it is recommended to verify with application restrictions of NT1065 "Nomada".

## 1.2 KEY FEATURES

- IO ports:
  - 1 RF inputs with active antenna supply capabilities 3V/5V
  - 4 RF outputs
  - 5V power supply connector
- Total gain 25dB per channel typ
- Noise figure 0.8dB typ

## 1.3 STRUCTURE

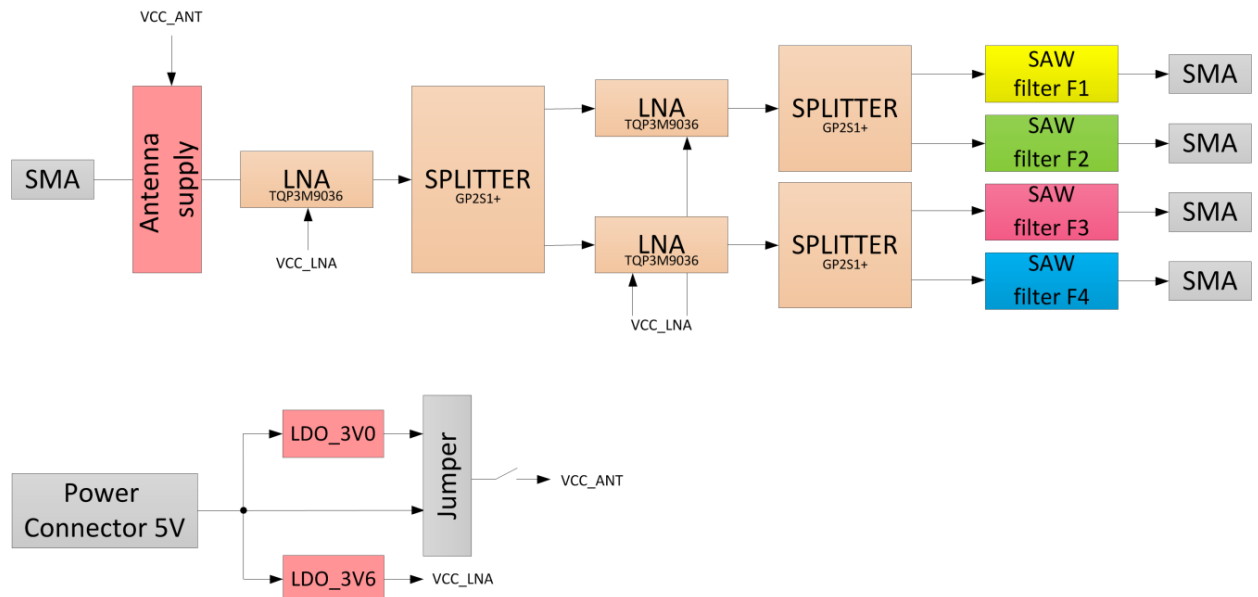


Figure 1.1: GNSS\_S14 block diagram

## 1.4 ORDERING INFORMATION

BS14 - X X X X

SAW filters	F1	F2	F3	F4	L1 GLO	L1 GPS	E1 Galileo	B1 BeiDou	L1 QZSS	L2 GLO	L2 GPS	L2 QZSS	L3 GLO	E5b Galileo	B2a BeiDou	B2b BeiDou	L5 GLO	L5 GPS	E5a Galileo	L5 QZSS	L5 IRNSS	
1 - TA0550A (1593 – 1609 MHz)					●																	
2 - TA0549A (1569 – 1582 MHz)						●	●	●	●													
3 - TA1785A (1560 – 1606 MHz)					●	●	●	●	●													
4 - TA1104A (1145 – 1253 MHz)										●	●	●	●	●	●	●	●	●	●	●	●	●
5 - TA0871A (1226 – 1249 MHz)										●	●	●										
6 - TA1227BB (1217 – 1237 MHz)											●	●										
7 - TA0582A (1180 – 1220 MHz)													●	●		●						
8 - TA0675A (1167 – 1186 MHz)															●		●	●	●	●	●	●

## 2 GNSS\_S24

### 2.1 OVERVIEW

GNSS\_S24 is 2-to-4 active splitter with L1, L2, L3 and L5 subbands RF preselection. It is intended to be used with NT1065 demo boards NT1065\_EVK, NT1065\_FMC, NT1065\_USB3 if passive or low gain antennas (cable losses included) should be plugged in. Paired solution provides less than 1dB of total noise figure and more than 35dB of outband RF rejection. Every channel can be assembled to pass through any of available GNSS bands independently, however, it is recommended to verify with application restrictions of NT1065 "Nomada".

### 2.2 KEY FEATURES

- IO ports:
  - 2 RF inputs with active antenna supply capabilities 3V/5V
  - 4 RF outputs
  - 5V power supply connector
- Total gain 13dB typ
- Noise figure 0.8dB typ

### 2.3 STRUCTURE

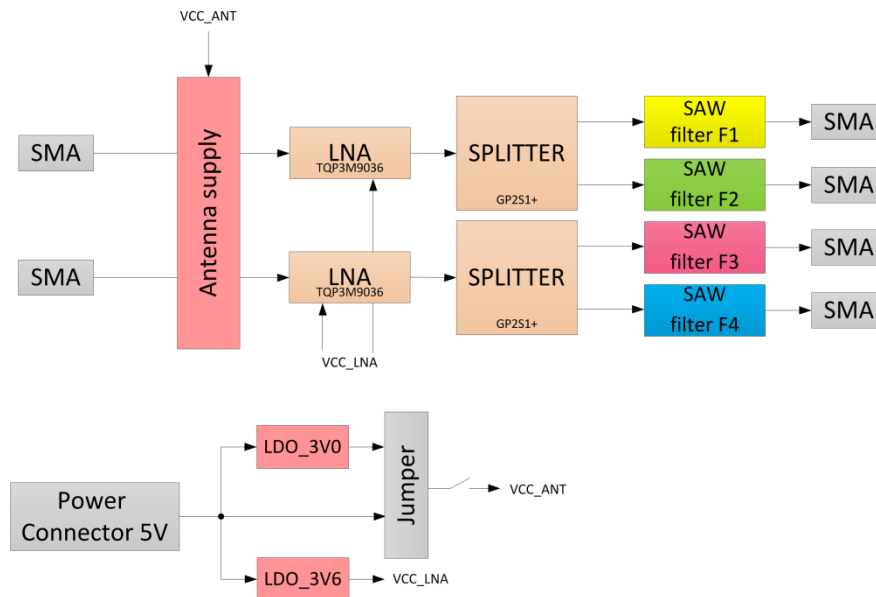


Figure 2.1: GNSS\_S24 block diagram

### 2.4 ORDERING INFORMATION

BS24 - X X X X

SAW filters	F1	F2	F3	F4	L1 GLO	L1 GPS	E1 Galileo	B1 BeiDou	L1 QZSS	L2 GLO	L2 GPS	L2 QZSS	L3 GLO	E5b Galileo	B2a BeiDou	B2b BeiDou	L5 GLO	L5 GPS	E5a Galileo	L5 QZSS	L5 IRNSS	
1 - TA0550A (1593 – 1609 MHz)					●																	
2 - TA0549A (1569 – 1582 MHz)						●	●	●	●													
3 - TA1785A (1560 – 1606 MHz)					●	●	●	●	●													
4 - TA1104A (1145 – 1253 MHz)										●	●	●	●	●	●	●	●	●	●	●	●	●
5 - TA0871A (1226 – 1249 MHz)										●	●	●										
6 - TA1227BB (1217 – 1237 MHz)											●	●										
7 - TA0582A (1180 – 1220 MHz)													●	●		●						
8 - TA0675A (1167 – 1186 MHz)															●		●	●	●	●	●	●

### 3 GNSS\_S44

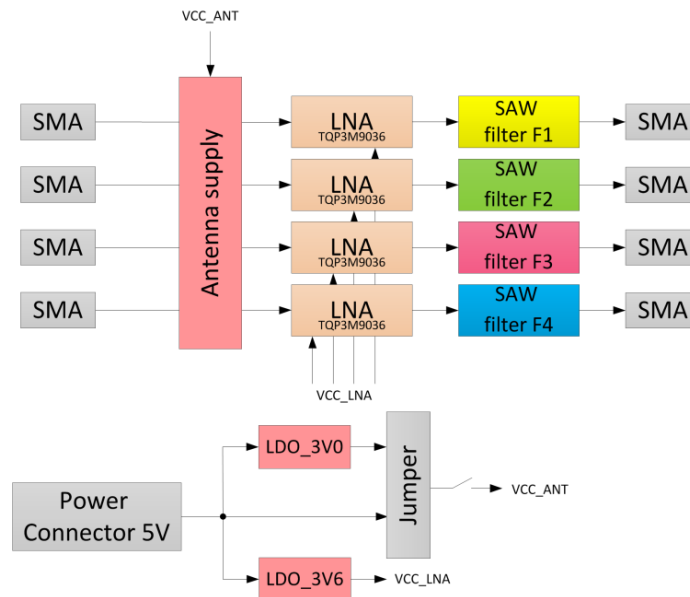
#### 3.1 OVERVIEW

GNSS\_S44 is a 4-channel RF preselector for L1, L2, L3 and L5 subbands. It is intended to be used with NT1065 demo boards NT1065\_EVK, NT1065\_FMC, NT1065\_USB3 if passive or low gain (cable losses included) antennas should be plugged in. Paired solution provides less than 1dB of total noise figure and more than 35dB of outband RF rejection. Every channel can be assembled to pass through any of available GNSS bands independently, however, it is recommended to verify with application restrictions of NT1065 "Nomada".

#### 3.2 KEY FEATURES

- IO ports:
  - 4 RF inputs with active antenna supply capabilities 3V/5V
  - 4 RF outputs
  - 5V power supply connector
- Total gain 17dB typ
- Noise figure 0.6dB typ

#### 3.3 STRUCTURE



**Figure 3.1:** GNSS\_S44 block diagram

#### 3.4 ORDERING INFORMATION

BS44 - X X X X

SAW filters	F1	F2	F3	F4	L1 GLO	L1 GPS	E1 Galileo	B1 BeiDou	L1 QZSS	L2 GLO	L2 GPS	L2 QZSS	L3 GLO	E5b Galileo	B2a BeiDou	B2b BeiDou	L5 GLO	L5 GPS	E5a Galileo	L5 QZSS	L5 IRNSS
1 - TA0550A (1593 – 1609 MHz)					●																
2 - TA0549A (1569 – 1582 MHz)						●	●	●	●												
3 - TA1785A (1560 – 1606 MHz)					●	●	●	●	●												
4 - TA1104A (1145 – 1253 MHz)										●	●	●	●	●	●	●	●	●	●	●	●
5 - TA0871A (1226 – 1249 MHz)										●	●	●									
6 - TA1227BB (1217 – 1237 MHz)											●	●									
7 - TA0582A (1180 – 1220 MHz)													●	●		●					
8 - TA0675A (1167 – 1186 MHz)															●		●	●	●	●	●