

Wireless LAN DPDT GaAs MMIC SWITCH

For IEEE 802.11a & IEEE802.11b/g (Combo Type)

NJG1617

NJR
NEWS

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NJG1617 GaAs MMIC Switch

NJRC is a leader in GaAs MMIC technology.

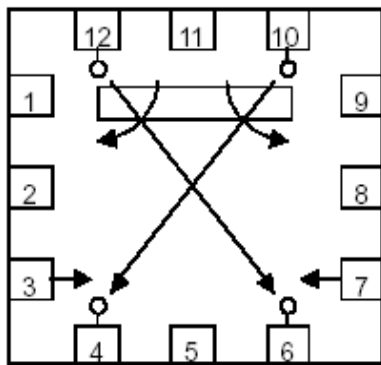
GENERAL DESCRIPTION

The NJG1617K11 is a DPDT MMIC switch which features low insertion loss, high isolation, wide frequency range (0.1-over 6GHz) and low voltage operation from 2.7V. This switch is ideally suited for wireless LAN IEEE 802.11b/802.11g (2.4GHz band) and IEEE 802.11a (5GHz band) applications.

Available in both the industrial standard QFN12-11 package and USB12-E3 package.

Pin Configuration

(TOP VIEW)



Truth Table

"H" = $V_{CTL(H)}$, "L" = $V_{CTL(L)}$

PASS	CONTROL SIGNAL	
	VCTL1	VCTL2
ANT1-TX ANT2-RX	L	H
ANT1-RX ANT2-TX	H	L

Features

- Low voltage operation: 2.7 to ~5V
- Pin at 0.2dB compression point: 32dBm typ. @f=6.0GHz, $V_{CTL}=3.0V$
- Low insertion loss: 0.7 dB typ. @f=2.5GHz
0.75 dB typ. @f=6.0GHz
- High isolation: 30 dB typ. @f=2.5GHz
25 dB typ. @f=6.0GHz
- Ultra small & ultra thin package:
QFN12-11 (Package size: 3.0x3.0x0.75mm)
USB12-E3 (Package size: 2.35x2.35x0.75mm)

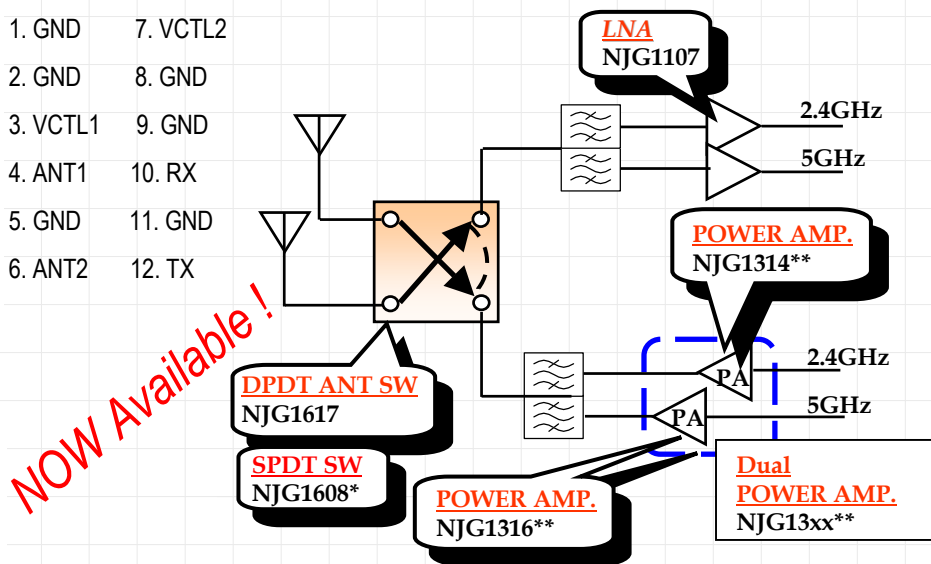
Applications

- Wireless LAN

Pin Connection

- | | |
|----------|----------|
| 1. GND | 7. VCTL2 |
| 2. GND | 8. GND |
| 3. VCTL1 | 9. GND |
| 4. ANT1 | 10. RX |
| 5. GND | 11. GND |
| 6. ANT2 | 12. TX |

Typical Application



* Under Development
** Planning

IEEE 802.11a & IEEE 802.11b/g (Combo Type)



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