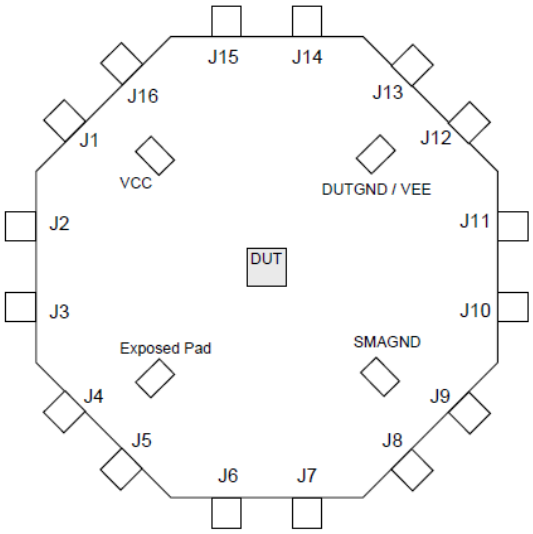
# NB6N14SMNGEVB Test Procedure




| | J1 | J2 | J3 | J4 | J5 | J6 | J7 | J8 | J9 | J10 | J11 | J12 | J13 | J14 | J15 | J16 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Pin#** | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| **Pin Name** | Q1 | Q1b | Q2 | Q2b | Q3 | Q3b | VCC | EN | INb | VREF_AC | VT | IN | GND | VCC | Q0 | Q0b |

## Board Check

Ground the VEE/DUT GND, SMA and EP (Surface Mount Test Points)
Apply 3.3 V on VCC (Surface Mount Test Point)

- Measure Current on VCC supply, should be roughly 60 mA to 70 mA
- Measure VREFAC (Pin10), should be roughly 1.8 V
- Measure Resistance across VT (Pin11) to IN (Pin12), should be roughly 50 Ohms
- Measure Resistance across VT (Pin11) to INb (Pin9), should be roughly 50 Ohms
- Measure EN (Pin8), should be roughly 3.3 V
- Measure Voltage on Q0 (Pin15), Q0b (Pin16), Q1 (Pin1), Q1b (Pin2), Q2 (Pin3), Q2b (Pin4), Q3 (Pin5) and Q3b (Pin6), should be roughly 1.25 V to 1.35 V

## Functional Check (outputs Toggle)

Ground INb (Pin9)
Apply 3.3 V on IN (Pin12)

- Measure Voltage on Q0 (Pin15), Q1 (Pin1), Q2 (Pin3) and Q3 (Pin5), should be roughly 1.8 V
- Measure Voltage on Q0b (Pin16), Q1b (Pin2), Q2b (Pin4) and Q3b (Pin6), should be roughly 0.85 V
- Check Current on VCC supply, should be roughly 100 mA

Ground IN (Pin12)
Apply 3.3 V on INb (Pin9)

- Measure Voltage on Q0 (Pin15), Q1 (Pin1), Q2 (Pin3) and Q3 (Pin5), should be roughly 0.85 V
- Measure Voltage on Q0b (Pin16), Q1b (Pin2), Q2b (Pin4) and Q3b (Pin6), should be roughly 1.8 V
- Check Current on VCC supply, should be roughly 100 mA