

ON Semiconductor

Is Now

The logo for onsemi, featuring the word "onsemi" in a dark teal, lowercase, sans-serif font. The letter "i" is stylized with a white dot and a teal vertical bar. A small orange triangle is positioned above the top right of the "i". A trademark symbol (TM) is located to the right of the logo.

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NCP171AMX180175TCG LDO Regulator, with Dual Power Mode demoboard

Demo Board Description

The demoboard supports the LDO regulator NCP171 in XDFN4 1.2 x1.2 mm package with fixed output voltage 1.8 V in Active mode and 1.75 V in Low Power mode. The Ultra Low Consumption typically below 50 nA in Low Power mode ensures long battery life with maximum output current up to 5 mA. The device in Active mode with maximum current up to 80 mA has excellent transient response suitable especially for wireless communication applications. ENABLE function allows turn off the output voltage and the device is available with or without active discharge feature.



Size: 50mm x 50mm x 12mm

Features and Applications

Features

- Operating Input Voltage Range: 1.7 V to 5.5 V
- Output Voltage Range: 0.6 V to 3.3 V (50 mV steps)
- Low Power Mode / Active Mode Externally Controlled by ECO pin
- Internally Factory Programmable Output Voltage Offset for Low Power/Active Mode to 50 mV, 100 mV, 150 mV, 200 mV
- Quiescent Current of 50 nA at No Load, (Low Power mode)
- Low Dropout: 41 mV Typ. at 80 mA ($V_{out} = 3.3$ V)
- $\pm 2\%$ Output Voltage Accuracy in Active Mode
- High PSRR: 65 dB at 1 kHz in Active Mode
- Active Output Discharge for Fast Output Turn-Off
- Current Limitation, Thermal Shutdown
- Available in Small XDFN4 1.2x1.2 Package
- These are Pb-Free Devices

Applications

- IoT
- RFID
- Portable Communication Equipment
- Consumer Electronics