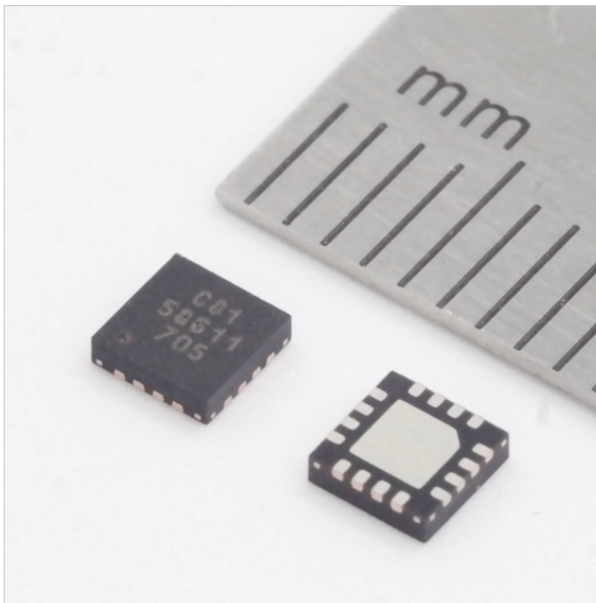


# DW8781

## Triple Output DC/DC for AMOLED Display

DW8781 is DC-DC converter with triple synchronous output (OUTP, OUTN and AVDD) for powering AMOLED display. The device integrates two boost converters for OUTP, AVDD and an inverting buck boost converter for OUTN which are suitable for battery operated products. The digital control pin CTRL allows programming the OUTP, OUTN and AVDD voltage in digital steps. DW8781 uses new technologies for high performance line and load regulation. These functions are required to prevent flicker noise of AMOLED display by input voltage drop and recovery during transmit periods in mobile phones.



**16 pin QFN** ▶  
W 3.00 mm  
H 3.00 mm  
D 0.75 mm

### Features

- Operating voltage: 2.9V to 4.5V
- 0.8% accuracy OUTP
- Adjustable output voltage by digital interface
  - OUTP : 4.6V to 5.2V with 0.1V Step (Default: 4.6V)
  - OUTN : -6.4V to -1.4V with 0.1V Step (Default: -4.0V)
  - AVDD : 5.0V to 7.7V with 0.1V Step (Default: 5.8V)
- Continuous output current
  - OUTP/OUTN : min. 360mA
  - AVDD : min. 100mA
- Short circuit protection
- Thermal Shutdown

### Applications

- AMOLED display for mobile device
- Smartphon
- Small size table
- Activematrix OLED Display  $\leq 8$

