

PRODUCT SUMMARY

CX20460 Power Management Integrated Circuit for GSM and GPRS Applications

Applications

GSM and GPRS handsets/data modules

Features

- Power on/off control
- Generation of system voltages from a single power source
- Eight regulators
- Built-in linear battery charger
- Analog multiplexer
- · Generation of system power on reset
- Overcurrent limiting
- Step-up DC/DC converter
- 48-pin LGA 7.0x7.0 mm package
- 3 V and 5 V Subscriber Identity Module (SIM) support including level shifting

Description

Skyworks Power Management Integrated Circuit (PMIC) integrates all the power supply and battery charging functions of a low power wireless system into one package. The device is designed for Global System for Mobile communications (GSM) and General Packet Radio Service (GPRS) cellular handset applications. The CX20460 PMIC is easily programmable using a two-wire serial interface to ensure maximum flexibility for a wide variety of designs.

The device provides the following functions:

- Voltage switching, conversion, and regulation
- Power management control logic
- Charging and monitoring of system battery
- SIM interface

The device is packaged in a 48-pin 7.0 x 7.0 mm Land Grid Array (LGA). The LGA includes a downset paddle, which should be connected to the board ground plane.

- CX20460-11 with a 1.20 mm chip height (For previous designs).
- CX20460-12 with a 1.00 mm chip height
- CX20460-32 with a 1.00 mm chip height

The CX20460 PMIC block diagram is shown in Figure 1. The device package is shown in Figure 2 through Figure 4.

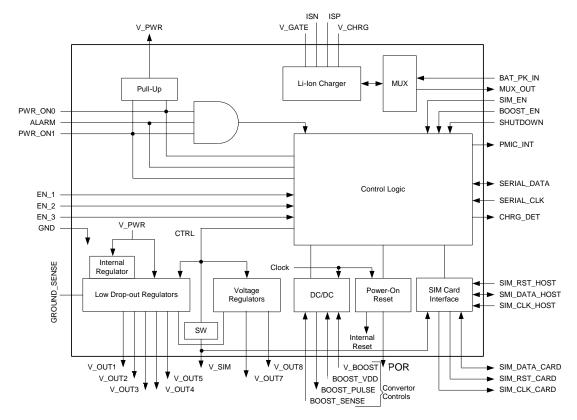


Figure 1. CX20460 PMIC Block Diagram

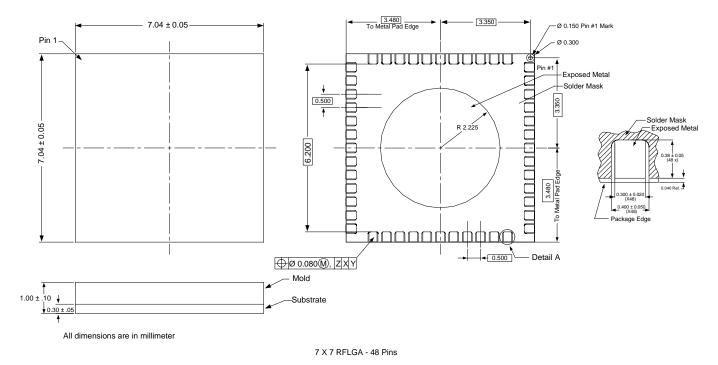
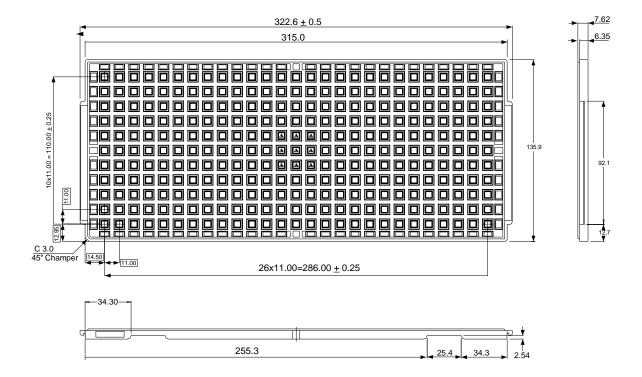


Figure 2. CX20460 PMIC Package Dimension 48 Pin LGA

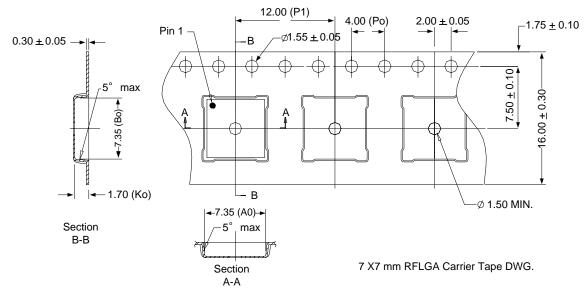
7x7mm RFLGA Shipping Tray



Note:

- Trays must meet all requirements of Skyworks GP01-D228 procurement spec for shipping tray.
- Material shall be bakeable carbon fiber/static dissipative w/ 140°C capability
- 3. All dimensions and tolerances in accordance with ASME Y4.5M-1994.
- 4. ESD-Surface resistivity shall be >/=1X10 5 ~ </=1X10 12 Ohms/Square per EIA, JEDEC, ACH Tray specification
- 5. All dimensions are in milimeter

Figure 3. CX20460 Shipping Tray Dimensions



Notes:

- Carrier Tapes must meet all requirements of Skyworks GP01-D232 procurement spec for tape and reel shipping.
- 2. Carrier Tape shall be black and conductive polystyrene.
- 3. Cover tape shall be transparent conductive pressure sensitive adhesive (PSA) material W/13.3 mm width.
- ESD-surface resistivity shall be (/_1X10¹⁰ Ohms/square per EIA, JEDEC TNR specification.
- 5. All dimensions are in milimeter.

Figure 4. CX20460 7 X 7 mm Tape and Reel Dimensions

Ordering Information

Model Name	Ordering Part Number	Evaluation Kit Part Number
Power Management Integrated Circuit	CX20460-11 (1.2 mm height – for previous designs)	
	CX20460-12 (1.0 mm height)	
	CX20460-32 (1.0 mm height)	

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