

**2A SOURCE/SINK LDO & SYNCHRONOUS SWITCHING
CONTROLLER**

PRELIMINARY DATA SHEET

DESCRIPTION

The NX2820 is a combination of synchronous Buck controller IC and 2A internal source/sink LDO regulator. It is designed for DDR memory application where typically synchronous controller provides either a 2.5V V_{ddq} for DDR1 type memory(1.8V for DDRII) and the internal LDO supplies V_{tt} from the V_{ddq} supply.

NX2820 features internal digital soft start, VCC undervoltage lock out; bus enable as well as over current limit by sensing low side MOSFET R_{ds(on)}. The source and sink LDO is protected by thermal shutdown and current limit. The NX2820 is housed in 16 pin MLPQ Package which provides small yet good thermal capability ideal for computer or graphic card applications.

FEATURES

- Internal 2A Source and Sink LDO
- Internal current Limit and thermal shutdown for LDO
- Shut down LDO by pulling down Refin pin
- Bus voltage operation from 4V to 25V
- Loss-Less Current Limit via R_{ds(on)} of Low side FET
- Internal Digital Soft Start Function
- Programmable start up voltage for BUS Supply using Enable pin
- Shut Down PWM controller via EN pin

APPLICATIONS

- DDR I and II application
- Graphic Card on board converters
- V_{ddq} and V_{TT} Supply in mother board applications

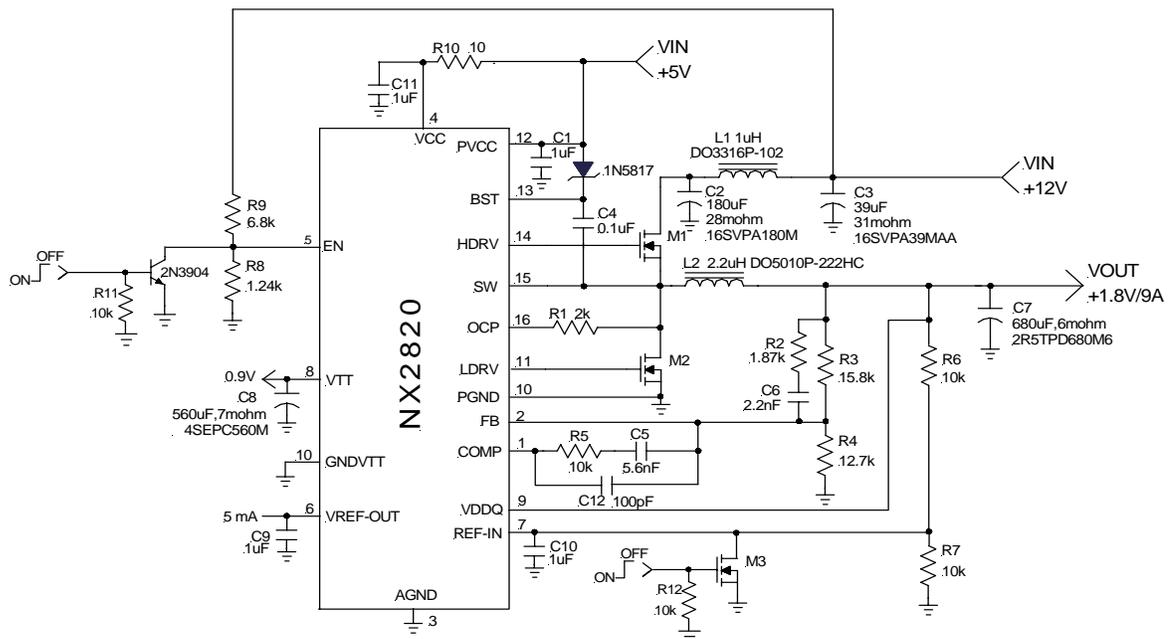
TYPICAL APPLICATION

Figure 1 - Typical application of 2820

ORDERING INFORMATION

Device	Temperature	Package	Frequency
NX2820CMTR	0 to 70°C	MLPQ-16L	300kHz