# NEXSEM<sub>-</sub>

## HIGH FREQUENCY & HIGH DRIVE SYNCHRONOUS PWM CONTROLLER

**PRELIMINARY DATA SHEET** 

### DESCRIPTION

## - FEATURES <10hm Driver keeps High Capacitance Synchro-

The NX2210/2211 family of controller ICs are synchro- ■ nous Buck controller IC designed for step down DC to DC converter applications. They are optimized to con- ■ vert bus voltages from 2V to 25V to outputs as low as ■ 0.8V voltage. Both devices offer an Enable pin that can be used to program the converter's start voltage using an external divider from bus voltage. The NX2211 oper- ■ ates at fixed 600kHz while 2210 has ability to program switching frequency from 200kHz to 1MHz, making it ■ ideal for applications requiring ceramic output capacitor. The NX2211 has an added Power Good function. Both devices have less than 50 nS of dead band which increases efficiency at higher frequencies.

Other features of the device are; Internal digital soft start; Vcc undervoltage lock out; Output undervoltage protec- ■ tion with digital filter and shutdown capability via the enable pin.

- nous MOSFET off during SW node transition
- Bus voltage operation from 2V to 25V
- Power Good indicator available for NX2211
- Fixed 600kHz for NX2211 and adjustable frequency up to 1MHz for NX2210
- Internal Digital Soft Start Function
- Less than 50 nS adaptive deadband
- Enable pin allows BUS voltage UVLO programmability
- Short protection with feedback UVLO

#### - APPLICATIONS

- Graphic Card on board converters
- Memory Vddq Supply
- On board DC to DC such as 12V to 3.3V. 2.5V or 1.8V
- ADSL Modem

#### TYPICAL APPLICATION

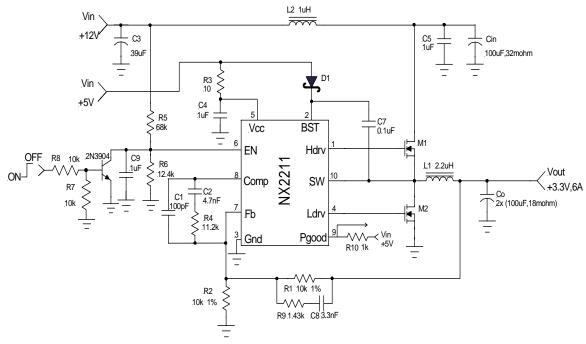


Figure 1 - Typical application of 2211

## - ORDERING INFORMATION

Device	Temperature	Package	Frequency
NX2210CMTR	0 to 70°C	MLPD-10L	200kHz to 1MHz
NX2211CMTR	0 to 70°C	MLPD-10L	600kHz