

Description

The TCS3510 is an integrated power supply solution optimized for small to medium size thin-film transistor (TFT) liquid crystal displays (LCD's).

Primarily intended for smart phone and tablet LCD panel's driver IC.

The positive charge pump has an internal switch and typically can support output current up to 100mA at $V_{CI}=3.3V$.

Negative charge pump has an internal switch to generate -1 ratio of VSN and typically can support output current up to 120mA at $V_{CI}=3.3V$.

The pump clock can be synchronized with external signal from driver IC or can be generated by internal circuit fixed to 300kHz.

The TCS3510 is available in a thin 12-pin 2.4x1.5 mm UTDFN green package.

Features

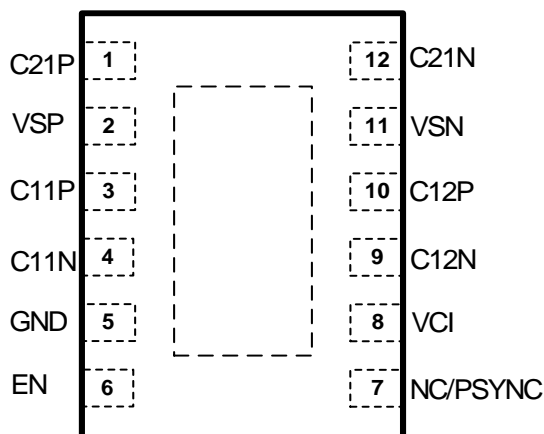
- ◆ 2.5V to 4.8V Input Supply.
- ◆ Generate two output voltage, positive voltage (VSP) and -1 ratio of VSN.
- ◆ Only 5 external capacitors.
- ◆ UTDFN-12 (2.4mmx1.5mm) Exposed Pad Package.

Applications

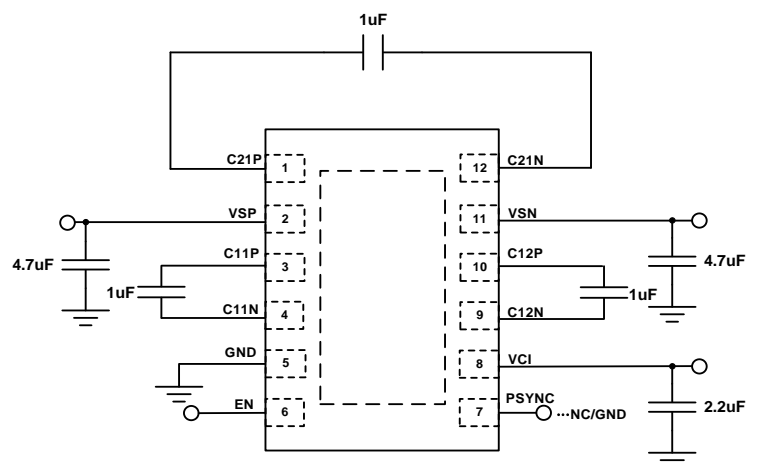
- ◆ TFT LCD for smart phone.
- ◆ Tablet LCD panel's driver IC.

Pin Assignments

Package (UTDFN-12)(2.4mm x 1.5mm)



Typical Application Circuit



Pump clock fixed to 300KHz
(generated by internal circuit) for
TCS3510