

Product Summary Sheet

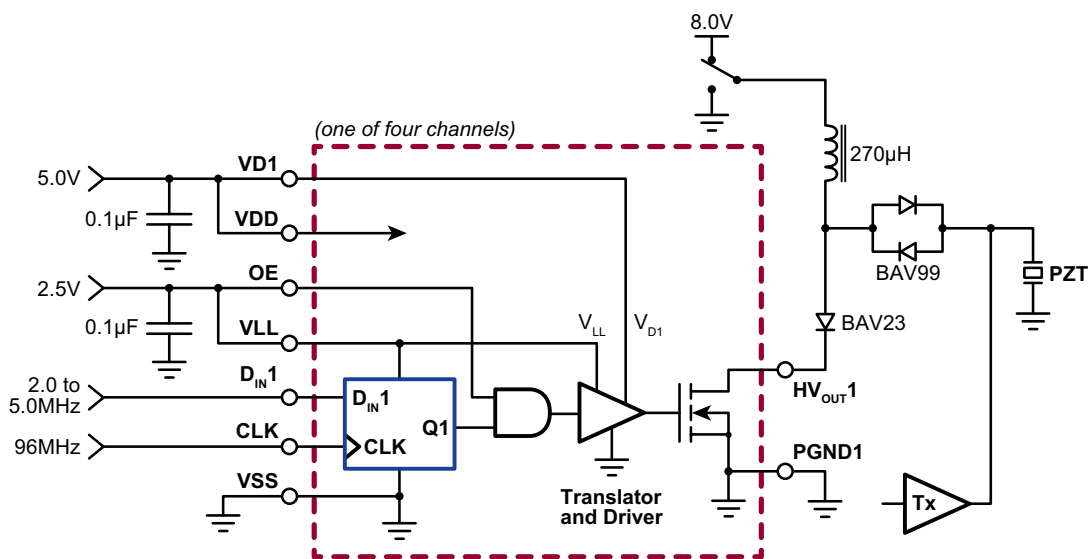
Four-Channel, Low Phase Noise, Low Power, Continuous Wave Transmitter

Applications:

- ▶ Diagnostic medical ultrasound
- ▶ Fluid flow measurement



24-Lead QFN (K6)



Typical Application Circuit

General Description

Supertex CW01 is a four-channel, low phase noise, continuous wave transmit IC. A high speed D flip-flop is provided to allow the D_{IN} frequency to be aligned to a high frequency clock. The output N-channel is turned on when a logic high is clocked into the D flip-flop. Data are clocked in during the low to high transition.

VD1, VD2, VD3 and VD4 are four individual input supply voltages for the N-channel output MOSFET gate drivers. High peak currents are drawn from these gate drives when the output MOSFETs are switching. To minimize jitter caused by voltage ripples, each channel has its own gate drive voltage pin; VD1, VD2, VD3 and VD4. A series ferrite bead and a decoupling capacitor are recommended on each VDX pin to minimize output jitter and channel to channel crosstalk.

Both V_{DD} and V_{LL} have undervoltage lockout to prevent spurious turn-on.

Features:	Benefits:
100V open drain N-channel	Allows for higher transmit voltages for deeper body tissue imaging capability
High speed D flip-flop	Minimizes phase noise
High speed MOSFET gate driver	Minimizes phase noise
Up to 200MHz clock input	Provides better resolution
Low output capacitance	Lowers power dissipation



Four-Channel, Low Phase Noise, Low Power, Continuous Wave Transmitter

Ordering Information / Availability

Part Number	Package Option	Samples	Product Availability
CW01K6-G	24-Lead QFN (Green)	Now	4-6 wks ARO

-G indicates the part is RoHS compliant (Green).



Product Contact

For any questions regarding the CW01 please contact your local area Supertex sales office, or contact the main office in the US at:

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