

**Product  
Summary  
Sheet**

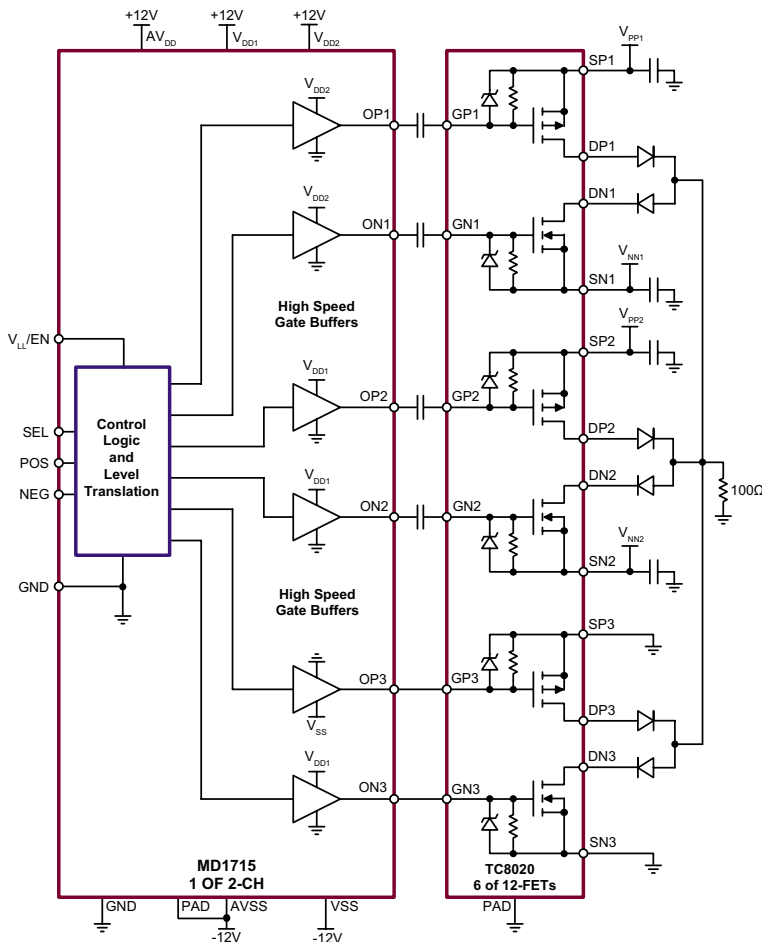
**Six Pair, N- and P-Channel  
Enhancement-Mode MOSFET**

**Applications:**

- ▶ Medical ultrasound imaging
- ▶ Piezoelectric transducer drivers
- ▶ Metal flaw detection
- ▶ Nondestructive evaluation



QFN-56 (K6)



Typical Application Circuit

**Product Overview:**

The Supertex TC8020 consists of six pairs of high voltage, low threshold N- and P-channel MOSFETs in a 56-lead QFN package. All MOSFETs have integrated gate-to-source resistors and gate-to-source Zener diode clamps which are desired for high voltage pulser applications. The complimentary, high-speed, high voltage, gate-clamped N- and P-channel MOSFET pairs utilize an advanced vertical DMOS structure and Supertex’s well-proven silicon-gate manufacturing process. This combination produces a device with the power handling capabilities of bipolar transistors and with the high input impedance and positive temperature coefficient inherent in MOS devices.

Characteristic of all MOS structures, this device is free from thermal runaway and thermally-induced secondary breakdown. Supertex’s vertical DMOS FETs are ideally suited to a wide range of switching and amplifying applications where very low threshold voltage, high breakdown voltage, high input impedance, low input and output capacitance, and fast switching speeds are desired.

Features:	Benefits:
200V drain-to-source breakdown voltage	Common voltage range for medical ultrasound
Integrated resistors and Zener diodes	Reduces board space and system cost
Low input capacitance	Minimizes propagation delay times and rise and fall times



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## Six Pair, N- and P-Channel Enhancement-Mode MOSFET

### Ordering Information / Availability

<u>Part Number</u>	<u>Package Option</u>	<u>Samples</u>	<u>Lead Time</u>
TC8020K6-G	56-Lead 8x8x1.0 QFN (Green)	4-6 weeks	4-6 Weeks ARO

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



### Product Contact

For any questions regarding the TC8020, please contact your local area Supertex sales office, or contact the main office in the US at:

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