



## MacroFiberComposite - MFC

### High Strain Piezo Fiber Patch

- ⦿ Actuator
  - ⦿ Sensor
  - ⦿ Energy Harvester
- ✓ Flexible, durable, reliable
  - ✓ Directional sensing and actuation
  - ✓ Available as elongator ( $d_{33}$ ) and contractor ( $d_{31}$ )
  - ✓ Conforms to surfaces, embeddable

## 1-3 Composites for Ultrasound

### Available technologies and frequency ranges

- ⦿ Dice&Fill 1-3 composites  
500kHz to 15MHz.
- ⦿ Random Fiber 1-3 composites  
40kHz to 5MHz, 35%, 65% and 80% fill factors.
- ⦿ Regular Fiber 1-3 composites  
100kHz to 800kHz, 25% to 48% fill factors.

## Piezo Electronics

### Electronics for driving and amplifying signals of piezo-electric components

- ⦿ High voltage Amplifiers, HVA  
-500V to +1500V, up to 100W.
- ⦿ Charge amplifiers for piezo electric strain measurement.
- ⦿ Conditioner for energy harvesting applications.