## Metric System

Prefixes expand or contract the basic units.

Prefixes are case sensitive.

### Frequency

```
1 kiloHertz (kHz) = 1,000 Hertz (Hz)

1 MegaHertz (MHz) = 1,000 kiloHertz (kHz) = 1,000,000 Hertz (Hz)

1.5 MegaHertz (MHz) = 1,500 kiloHertz (kHz) = 1,500,000 Hertz (Hz)

3.525 MegaHertz (MHz) = 3,525 kiloHertz (kHz) = 3,525,000 Hertz (Hz)

28.4 MegaHertz (MHz) = 28,400 kiloHertz (kHz) = 28,400,000 Hertz (Hz)

1 GigaHertz (GHz) = 1,000 MegaHertz (MHz) = 1,000,000,000 Hertz (Hz)

2.425 GigaHertz (GHz) = 2,425 MegaHertz (MHz)
```

# Voltage

1 kiloVolt (kV) = 1,000 Volts (V)  
1 microVolt (
$$\mu$$
V) = 1 one-millionth of a Volt (V)

#### Current

- 1 Ampere (A) = 1,000 milliAmperes (mA)
- 1.5 Amperes (A) = 1,500 milliAmperes (mA)
  - 3 Amperes (A) = 3,000 milliAmperes (mA)

#### Power

$$1 \text{ Watt } (W) = 1,000 \text{ milliWatts } (mW)$$

$$0.5 \text{ Watt (W)} = 500 \text{ milliWatts (mW)}$$

# Capacitance

1 microFarad ( $\mu$ F) = 1,000,000 picoFarads (pF)