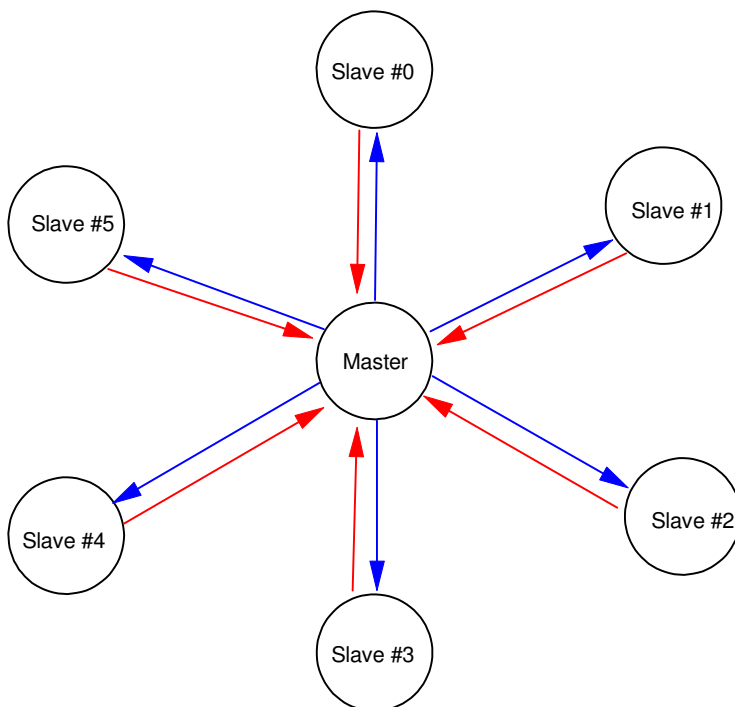


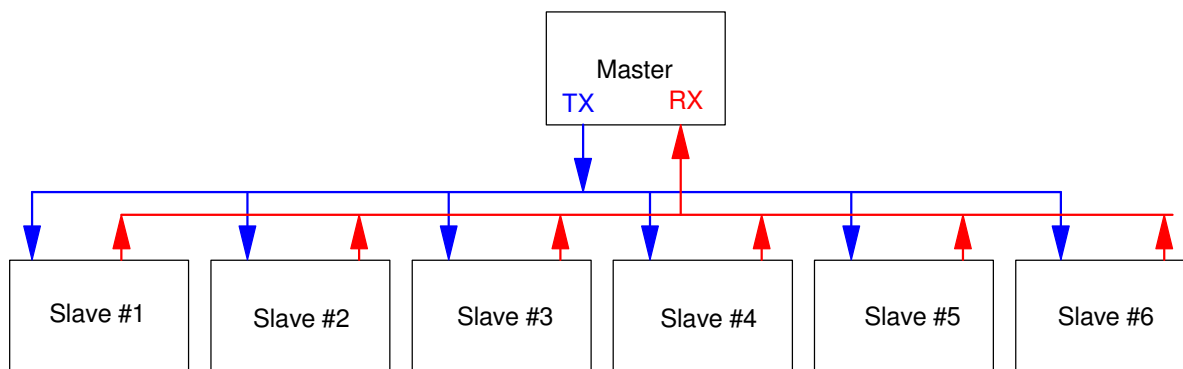
Networks

Star Network (Master / Slave)

All communications comes from and goes through the master



Another way to draw it



Parse the message (programmer's pick)

Option #1

```
0123456789x
S01T200N500
```

- Sensor #1
- T = 200ms (sampling rate)
- N = 500 (number of data points)

```
ID = ( MSG1[1] - 48) * 10
      + ( MSG1[2] - 48) * 1;
T   = ( MSG1[4] - 48) * 100
      + ( MSG1[5] - 48) * 10
      + ( MSG1[6] - 48) * 1;
N   = ( MSG1[8] - 48) * 100
      + ( MSG1[9] - 48) * 10
      + ( MSG1[10] - 48) * 1;
```

```
if(ID == 1) {
    for(i=0; i<N; i++) {
        VOLT = A2D_Read(0) * 0.488;
        SCI_Out(VOLT, 3, 2);
        SCI_CRLF();
        LCD_Move(0,0); LCD_Out(i, 3, 0);
        Wait_ms(T);
    }
}
```

Option #2

T200
N500
S01
G

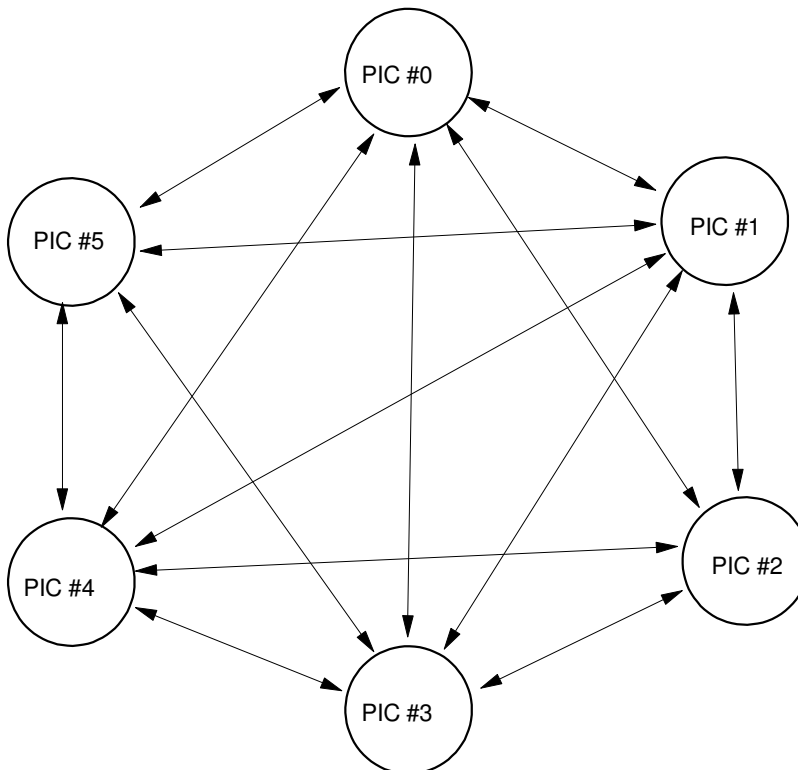
Code:

```
if(MSG[0] == 'T') {
    T = ( MSG1[1] - 48) * 100
      + ( MSG1[2] - 48) * 10
      + ( MSG1[3] - 48) * 1;
}
if(MSG[0] == 'N') {
    N = ( MSG1[1] - 48) * 100
      + ( MSG1[2] - 48) * 10
      + ( MSG1[3] - 48) * 1;
}
if(MSG[0] == 'S') {
    ID = ( MSG1[1] - 48) * 100
      + ( MSG1[2] - 48) * 10
      + ( MSG1[3] - 48) * 1;
}

if(MSG[0] == 'G') {
    if(ID == 1) {
        for(i=0; i<N; i++) {
            VOLT = A2D_Read(0) * 0.488;
            SCI_Out(VOLT, 3, 2);
            SCI_CRLF();
            LCD_Move(0,0); LCD_Out(i, 3, 0);
            Wait_ms(T);
        }
    }
}
```

Ring Network

Any device can talk to any other device



Another way to draw it

