```
// SUPER LED PROGRESS
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY

// RUNING LED PROCESS
S 40 FE FF FF FF FF FF P // P00 LED ON
W100 //0.1S DELAY
S 40 FD FF FF FF FF FF P // P01 LED ON
W100 //0.1S DELAY
S 40 FB FF FF FF FF FF P // P02 LED ON
W100 //0.1S DELAY
S 40 F7 FF FF FF FF FF P // P03 LED ON
W100 //0.1S DELAY
S 40 EF FF FF FF FF FF P // P04 LED ON
W100 //0.1S DELAY
S 40 DF FF FF FF FF FF P // P05 LED ON
W100 //0.1S DELAY
S 40 BF FF FF FF FF FF P // P06 LED ON
W100 //0.1S DELAY
S 40 7F FF FF FF FF FF P // P07 LED ON
W100 //0.1S DELAY

S 40 FF FE FF FF FF FF P // P10 LED ON
W100 //0.1S DELAY
S 40 FF FD FF FF FF FF P // P11 LED ON
W100 //0.1S DELAY
S 40 FF FB FF FF FF FF P // P12 LED ON
W100 //0.1S DELAY
S 40 FF F7 FF FF FF FF P // P13 LED ON
W100 //0.1S DELAY
S 40 FF EF FF FF FF FF P // P14 LED ON
W100 //0.1S DELAY
S 40 FF DF FF FF FF FF P // P15 LED ON
W100 //0.1S DELAY
S 40 FF BF FF FF FF FF P // P16 LED ON
W100 //0.1S DELAY
S 40 FF 7F FF FF FF FF P // P17 LED ON
W100 //0.1S DELAY

S 40 FF FF FE FF FF FF P // P20 LED ON
W100 //0.1S DELAY
S 40 FF FF FD FF FF FF P // P21 LED ON
W100 //0.1S DELAY
S 40 FF FF FB FF FF FF P // P22 LED ON
W100 //0.1S DELAY
S 40 FF FF F7 FF FF FF P // P23 LED ON
W100 //0.1S DELAY
S 40 FF FF EF FF FF FF P // P24 LED ON
W100 //0.1S DELAY
S 40 FF FF DF FF FF FF P // P25 LED ON
W100 //0.1S DELAY
S 40 FF FF BF FF FF FF P // P26 LED ON
W100 //0.1S DELAY
S 40 FF FF 7F FF FF FF P // P27 LED ON
W100 //0.1S DELAY

S 40 FF FF FF FE FF FF P // P30 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FD FF FF P // P31 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FB FF FF P // P32 LED ON
W100 //0.1S DELAY
S 40 FF FF FF F7 FF FF P // P33 LED ON
W100 //0.1S DELAY
```

S 40 FF FF FF EF FF FF P // P34 LED ON
W100 //0.1S DELAY
S 40 FF FF FF DF FF FF P // P35 LED ON
W100 //0.1S DELAY
S 40 FF FF FF BF FF FF P // P36 LED ON
W100 //0.1S DELAY
S 40 FF FF FF 7F FF FF P // P37 LED ON
W100 //0.1S DELAY

S 40 FF FF FF FF FE FF P // P40 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FD FF P // P41 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FB FF P // P42 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF F7 FF P // P43 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF EF FF P // P44 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF DF FF P // P45 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF BF FF P // P46 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF 7F FF P // P47 LED ON
W100 //0.1S DELAY

S 40 FF FF FF FF FF FE P // P50 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FF FD P // P51 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FF FB P // P52 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FF F7 P // P53 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FF EF P // P54 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FF DF P // P55 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FF BF P // P56 LED ON
W100 //0.1S DELAY
S 40 FF FF FF FF FF 7F P // P57 LED ON
W100 //0.1S DELAY

//Read test
//D= data, A= acknowledge, NA= non-acknowledge
//40= device address + Write, 41= device address + Read
//S= I2C Start, P= I2C stop.
// If acknowledge at last byte, it is still ok, but non-acknowledge means last byte.

S 40 P S 41 D A D A D A D A D A D NA P

S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA P
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA P

// RUNING LED PROCESS
S 40 FE FF FF FF FF FF P // P00 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA P

S 40 FD FF FF FF FF FF P // P01 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA P

S 40 FB FF FF FF FF FF P // P02 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA P

S 40 F7 FF FF FF FF FF P // P03 LED ON

W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 EF FF FF FF FF FF **P** // P04 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 DF FF FF FF FF FF **P** // P05 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 BF FF FF FF FF FF **P** // P06 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 7F FF FF FF FF FF **P** // P07 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF FE FF FF FF FF **P** // P10 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF FD FF FF FF FF **P** // P11 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF FB FF FF FF FF **P** // P12 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF F7 FF FF FF FF **P** // P13 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF EF FF FF FF FF **P** // P14 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF DF FF FF FF FF **P** // P15 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF BF FF FF FF FF **P** // P16 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF 7F FF FF FF FF **P** // P17 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF FF FE FF FF FF **P** // P20 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF FF FD FF FF FF **P** // P21 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF FF FB FF FF FF **P** // P22 LED ON
W100 //0.1S DELAY
//Read test
S 40 **P S** 41 D A D A D A D A D A D NA **P**

S 40 FF FF F7 FF FF FF **P** // P23 LED ON

W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF EF FF FF FF P // P24 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF DF FF FF FF P // P25 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF BF FF FF FF P // P26 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF 7F FF FF FF P // P27 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF FE FF FF P // P30 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF FD FF FF P // P31 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF FB FF FF P // P32 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF F7 FF FF P // P33 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF EF FF FF P // P34 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF DF FF FF P // P35 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF BF FF FF P // P36 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF 7F FF FF P // P37 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF FF FE FF P // P40 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF FF FD FF P // P41 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF FF FB FF P // P42 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA P

S 40 FF FF FF FF F7 FF P // P43 LED ON

```
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF EF FF P // P44 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF DF FF P // P45 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF BF FF P // P46 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF 7F FF P // P47 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF FE P // P50 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF FD P // P51 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF FB P // P52 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF F7 P // P53 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF EF P // P54 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF DF P // P55 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF BF P // P56 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF 7F P // P57 LED ON
W100 //0.1S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P

S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P
```

// Write Read 1000 times

```
L500
{
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
//Read test
S 40 P S 41 D A D A D A D A D A D NA  P
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
```

```
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA   P
  }


//ON OFF Test
L10
{
// SUPER LED PROGRESS
W500 //0.5S DELAY
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W500 //0.5S DELAY
S 40 00 00 00 00 00 00 P // ALL LED ON
W500 //0.5S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
W8000 //8S DELAY
}
// 0.4Hz 80% 3.3V repeat 100 times
L100
{
// SUPER LED PROGRESS
S 40 00 00 00 00 00 00 P // ALL LED ON
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA   P
W500 //1S DELAY
S 40 FF FF FF FF FF FF P // ALL LED OFF
//Read test
S 40 P S 41 D A D A D A D A D A D A D NA   P
W1950 //0.5S DELAY
}
```