

Clemens Valens

2^e
édition
revue et augmentée

maîtrisez les microcontrôleurs à l'aide d'Arduino

+ nouvelle carte d'expérimentation polyvalente

```
Wire.beginTransmission(MLX90614_ADDRESS);  
Wire.write(MLX90614_READ_TEMPERATURE);  
// Restart without sending a stop condition.  
Wire.endTransmission(false);  
Wire.requestFrom(MLX90614_ADDRESS,3,true);  
if (Wire.available()!=0) lsb = Wire.read();  
if (Wire.available()!=0) msb = Wire.read();  
if (Wire.available()!=0) pec = Wire.read();  
Wire.endTransmission(true);
```

```
    crc = 0;  
    MLX90614_crc_update(MLX90614_ADDRESS<<1);  
    MLX90614_crc_update(MLX90614_READ_TEMPERATURE);  
    MLX90614_crc_update((MLX90614_ADDRESS<<1)|0);  
    MLX90614_crc_update(lsb);  
    MLX90614_crc_update(msb);  
    if (pec==crc) value = (msb<<8) + lsb;  
    return value;
```

```
void setup(void)
```

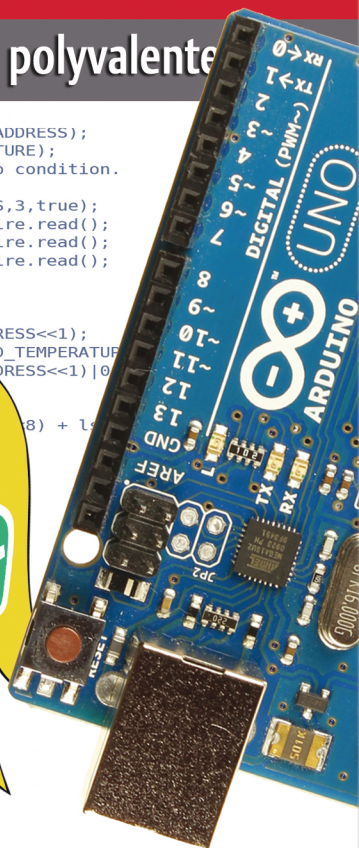
```
    digitalWrite(11,HIGH);  
    pinMode(alarm,OUTPUT);  
    digitalWrite(alarm,LOW);  
    pinMode(MLX90614_sda,INPUT);  
    pinMode(MLX90614_scl,INPUT);  
    Wire.begin(MLX90614_ADDRESS);
```

```
void loop(void)
```

```
{  
    delay(100);  
  
    float t = MLX90614_read();  
    t = t*1.25+273.15;  
    Serial.println(t);
```

```
    if (t>TEMPERATURE_MAX)
```

```
{  
    Serial.println("Alarm!");  
    digitalWrite(alarm,HIGH);
```



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