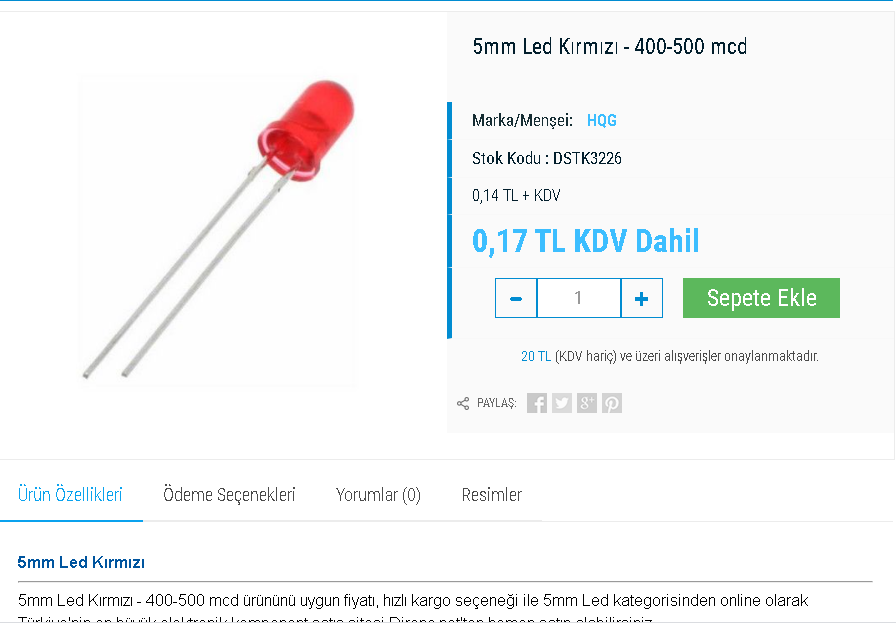
**DERS İÇİN GEREKLİ MALZEMELER (Bir öğrenci için)**

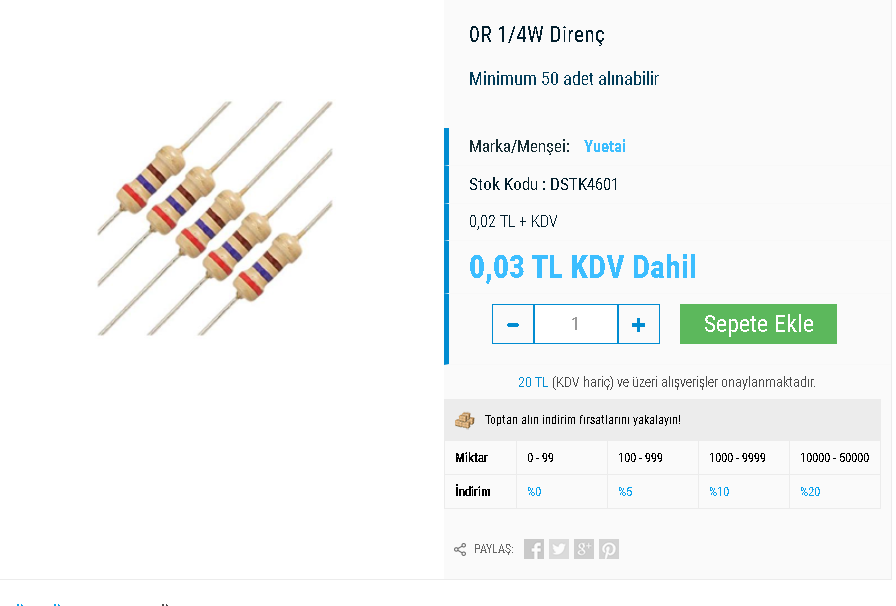
**Aşağıdaki malzemeler öğrenci sayısı kadar alınacaktır. En az 15 öğrenci için planlama yapılacaktır.**

**1. NodeMCU**

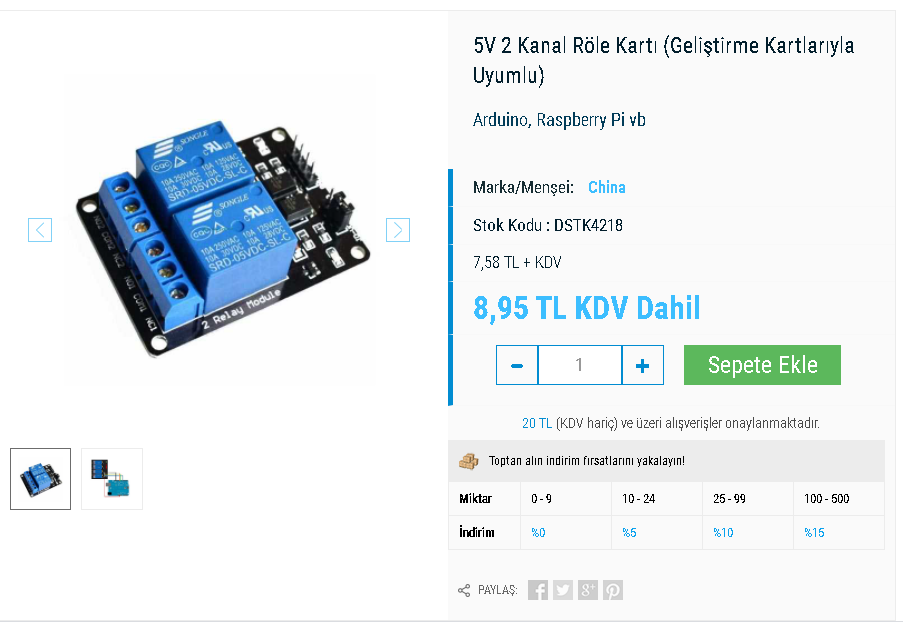


**2. Muhtelif sayıda LED ve dirençler(250-300 ohm ve 1K ve 10K değerlerinde)**

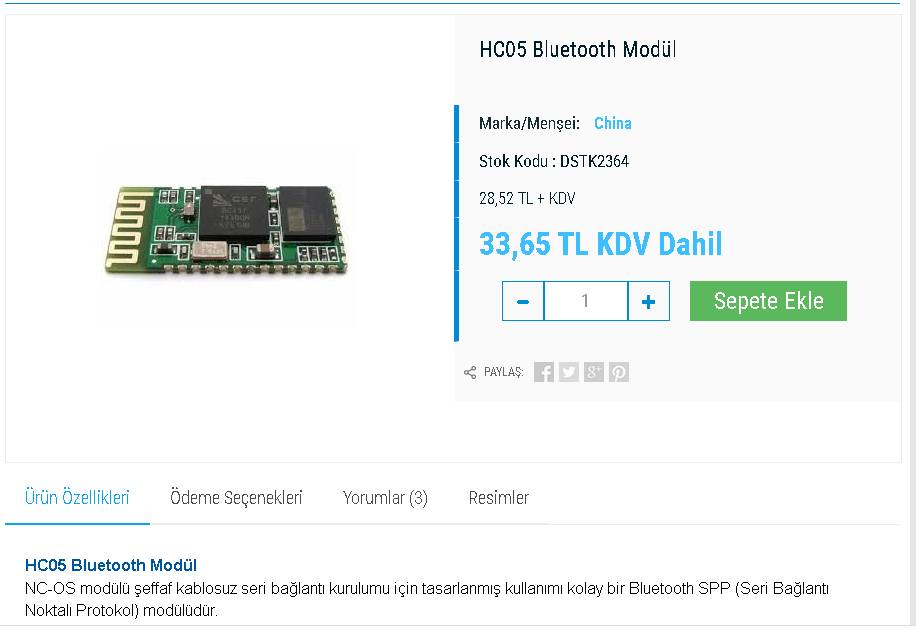




**3. Arduino uyumlu Röle kartı (2 veya 4 kanallı)**



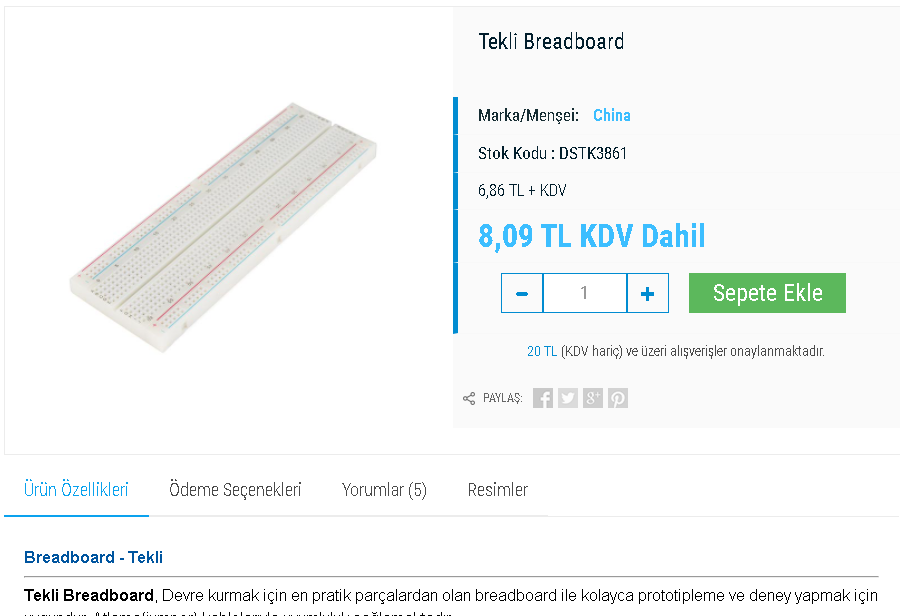
**4. Bluetooth modül**



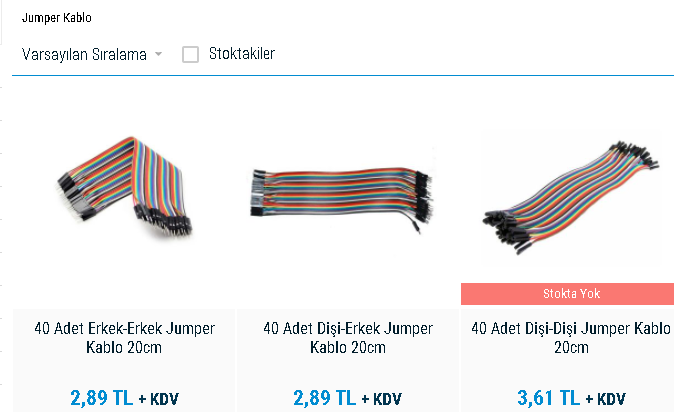
**5. DHT11 sıcaklık ve nem sensörü**



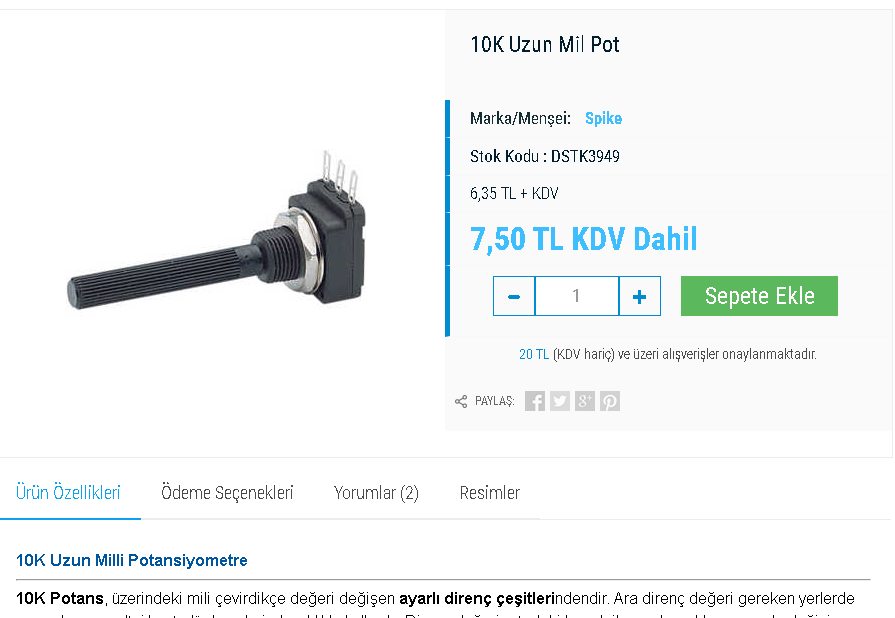
**6. ProtoBoard**



**7. Erkek, Dişi ve Karışık board bağlantı kabloları (jumpers)**



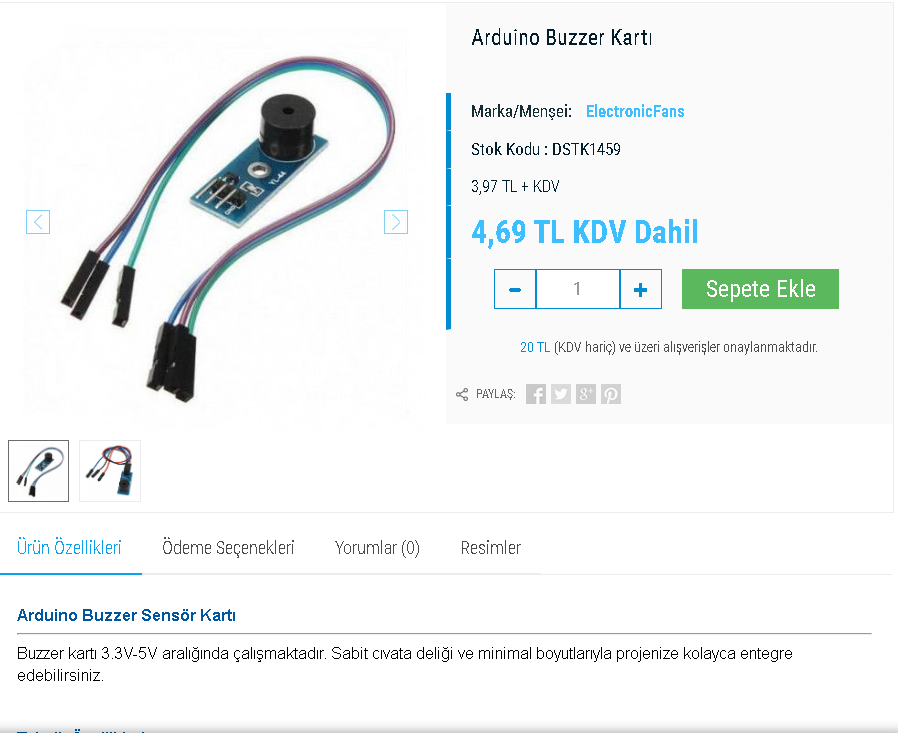
**8. Potansiyometre (10K civarında olabilir)**



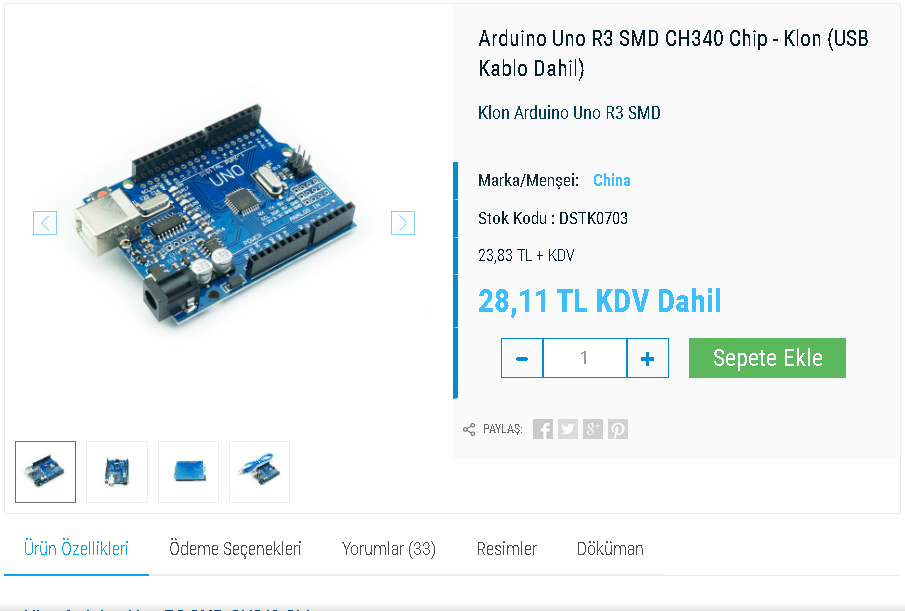
**9. LM35 sıcaklık sensörü**

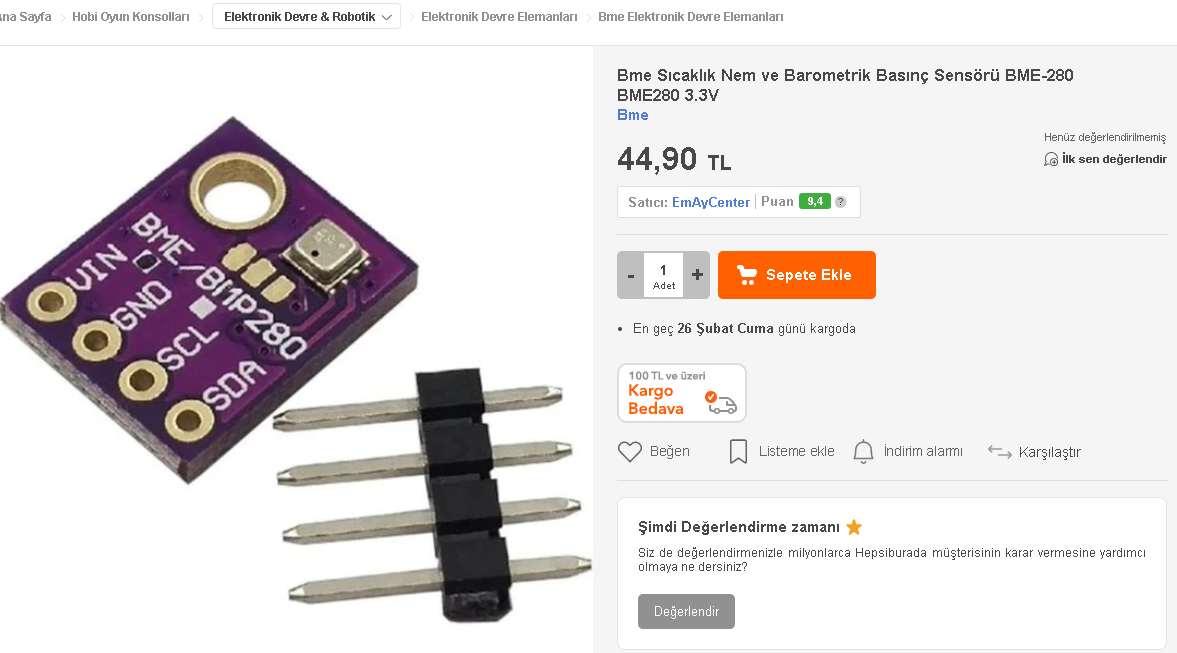


**10.Buzzer**



**11. Arduino UNO**

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12 Basınç, sıcaklık ve nem sensörü (BME280)

13. 