

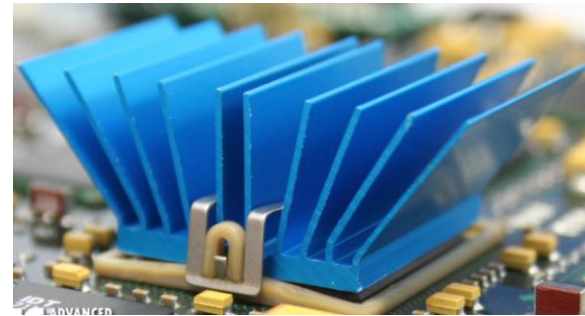
EE 2920

Dr. Johnson

Homework 16

1) Identify the type of package for each device below

- 20pts



What is this?

2) Our micro-controller design will be used in a biomedical application that is to be implanted under the skin of a dog. What is the maximum clock frequency we can operate at? - 80pts

assume: A typical dogs body temperature is $38.5\text{ }^{\circ}\text{C}$

θ_{JA} for our processor is $25\text{ }^{\circ}\text{C/W}$

$T_J \text{ max} = 120^{\circ}\text{C}$

Core + Peripheral current = 20mA/MHz

Total IO current = 25mA/MHz

3.3V , supply voltages

$F_{\text{max}} =$

3) Please identify any topics you think

a) we should spend more time on

b) we should spend less time on

4) Please identify any topics you think

a) should be added

b) should be removed

5) My favorite section / topic / concept was

6) My least liked section / topic / concept was

7) Please identify any other ideas that would improve the course: