

EE 2920

Dr. Johnson

Homework 14

1) What output value would High-Level output pin pull a 200Ω resistor tied to Gnd up to? Assume $V_{cc}=3v$, $T=85^{\circ}C$, typical - 50pts

$V_{OH} =$

$I_{OH} =$

2) Your MSP system design can support either:

a – 48MHz operation with a 50% active time

b – 24MHz operation with a 90% active time

Ignoring peripherals and I/Os, which solution should you choose from an overall power perspective? **must show work** - 50pts

assume 3V, 25C, typical values, flash operation, coremark code

assume active time is in AM-DCDC-VCORE1 mode

assume non-active time is in LPM0-DCDC-VCORE1 mode