

UTAustinX: UT.6.01x Embedded Systems - Shape the World

KarenWest (/dashboard)

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VIDEO 8.4. THE DIGITAL SOLUTION INTRODUCED

Help

0:00 / 0:40

DR. JONATHAN VALVANO: Hi.

Next we're going to build the digital system,

the one made out of the microcontroller.

And so first we'll look at the components we need to construct it.

OK.

So first, again, we're going to have a protoboard,

because we're going to build circuits.

And we're going to have the same things we had before, switches, wires,

resistors, and the LED.

But now we're going to add this beautiful \$12 board.

So I say, why build a system that only cost \$0.50 when we can build one that

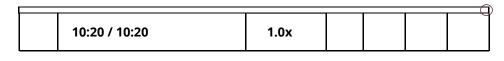
costs \$12.50 that's even more fun?

OK.

Let's begin.

VIDEO 8.5. DESIGN OF THE DIGITAL SOLUTION

Help



(JONATHAN VALVANO) Let's build the microcontroller-based system.

We'll start with a microcontroller, which is the TM4C123.

And we will show you a data flow diagram which

illustrates how information flows through this system.

We have our inputs, which in this case is a switch,



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