

Embedded Systems Essentials with Arm: Getting Started

Module 5

W (5): Module 5 – Welcome and introduction

We take in information continuously, via our 5 senses: the temperature of our surroundings, the feel of the keyboard underneath our fingers, the taste of our morning coffee. Embedded systems also take in information via an array of sensors. But that information comes in continuously — and the processor that has to act on the data can only deal with one small point in time. How do you, the designer, translate between these very different ways of perceiving information?

Analog to digital conversion is key to allowing an embedded system to interact with, control, and be controlled by its surroundings – whether the humidity of a museum display, the amount of light in a camera lens, or the weight of a load of cargo – and it's how you can design an independently functional embedded system.