

Ktechnics Systems; Innovative Technology Solutions Partner

Date and time:

Wed, 2015-07-01 12:39

Location / Venue:

American Wing



Mr. Mwangi training High School Students on Robotics and Electronics.

Meet out going fifth year student, Mr. Mwangi Anthony who now owns a company, [K-Technics](#), that Provides Firmware Design and programming in C, and C++ languages and selling of electronic equipment that are used to design academic projects.

They also train high school students on Robotics and Electronics to equip them with practical knowledge to solve everyday challenges at his new company, [Electroboats](#).

K-Technics has experience with the following microcontrollers and microprocessors:

- Atmel AVR
- 8051 compatible Architectures
- Microchip PIC Series
- ATSAM Series
- ARM7, ARM9, ARM11
- ST
- NXP

And the following micro integrated development environments:

- Keil uVision
- AVR Studio with GNU WinAVR
- Microchip MPLAB
- MikroElectronica mikroC
- Arduino IDE
- Coccox IDE

Hardware Design

K-Technics designs Embedded Hardware based on microprocessors, systems-on-chip (SoC), FPGA, DSP and MCU. We gather initial technical and functional requirements, design schematic diagrams and multilayer printed circuit boards. The Design Considerations include:

- Signal Integrity considerations
- Power Integrity considerations
- High speed routing guide lines
- Differential Signal and Impedance control routing guide lines.
- Power planes and PCB Stack design consideration
- Thermal considerations
- Environmental safety requirements and RoHS

Schematic Diagrams

At K-Technics, we design revision-controlled schematics with highest accuracy levels, and highest readability. This means our schematics symbols, schematic component placement and wiring of the circuit is done in such a way that it increases the readability of the Schematics. In

addition, we perform multiple cycles of verification of the design right from block level diagram, part selection, symbol creation, schematic entry and till the complete design of the system.

Designing digital and Mixed Signal schematic diagrams based on modern electronic components. Implementation of high-speed interfaces, integration with wireless data transfer modules (WiFi, ZigBee, Bluetooth, GSM/GPRS) and other hardware interfaces.

To find more about K-Technics and to order for their products go to, <http://ktechnics.com/>