Call for Papers

SPECIAL ISSUE ON:
Hardware-Assisted Techniques for Security and Protection of Consumer Electronics

Editor-in-Chief: Andrew Tyrrell, University of York, UK

The EDA/hardware/VLSI community comprises people from diverse backgrounds (especially hardware and IP cores) leveraged for Consumer Electronics (CE). The electronics design industry is heading for a paradigm shift towards secured, reliable and low cost CE hardware as compared to conventional approaches. With this special section, we aim to present novel solutions for any security/protection problems related to hardware used in CE.

Consumer electronics comprising of high end devices ranging from digital cameras, multi-spectral cameras, smart tablets, and night vision cameras to smart meters, along with information and communication technology could make the emerging concepts of smart cities and Internet of Things (IoT) a reality. In the world of CE, security, privacy, and protection of hardware and its information are equally important. “Hardware-Assisted Security” is defined as the security/protection of hardware/intellectual property (IP) cores of CE devices or information by a hardware/system of CE devices. The term “security” encapsulates a broad theme that covers many aspects including hardware security, protection, privacy, trustworthiness, and IP protection and information security. System security may refer to the security of the system (e.g. a specific CE device) that handles the data or information.

Manuscripts should be scoped within the domain of Hardware-Assisted Security for CE devices and should be original manuscripts prepared in accordance to the normal requirements of IET Computers & Digital Techniques.

Topics covered include:

- Hardware security against Trojans for CE devices
- Forensic engineering based protection of CE hardware
- IP core/hardware security against NBTI attacks on DSP
- Hardware security/IP core protection against reverse engineering attacks for CE devices
- Protection mechanisms of IC/IP buyer
- Protection mechanisms of IC/IP seller
- Energy-efficient digital-rights management hardware for CE
- IP core protection of CE hardware
- Active and passive IP security of CE hardware
- PUF based security and protection methods of CE hardware
- Side channel attack resistant embedded systems, DRM systems

Submit your paper to the manuscript submission and peer review site via the following link:

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