



NXP Selects Dover Microsystems' State-of-the-Art CoreGuard Cybersecurity Technology for Future Embedded Platforms

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SAN JOSE, CA (ArmTechCon2018) – October 10, 2018 – NXP Semiconductors today announced, it has engaged with Dover Microsystems to introduce Dover's CoreGuard™ cybersecurity technology in future platforms. Known as a sentry processor, CoreGuard is a hardware-based security IP that enables embedded processors to defend themselves against software vulnerabilities and network-based attacks.

Increasing functionality of edge devices brings an exponential increase in software complexity. Despite efforts, complexity inevitably creates exploitable vulnerabilities. CoreGuard IP provides defense against such software exploits by acting as a bodyguard to the host processor and its pipeline, decoder, and execution units. Its main function is to verify that instructions fetched by the host processor comply with a pre-defined set of security rules called micropolicies. If any instruction violates a micropolicy, CoreGuard prevents the host processor from executing that instruction, notifies the host operating system so it can take remedial action, and thus eliminates potential damage. In this way, CoreGuard is a perfect complement to NXP's foundation of secure execution, trust assurance, and tamper resistance.

About Dover Microsystems

Dover's history of developing technology originated in 2010, as a result of the DARPA CRASH program. CRASH was a \$100 million government investment, motivated by the Stuxnet cyberattack on nuclear centrifuges, to design a way to combat cyber threats with a clean-slate approach to processing architecture. In 2015, the CoreGuard technology was incubated inside Draper and further developed. In 2017, Dover Microsystems was spun out from Draper with an exclusive license to commercialize the revolutionary technology.

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