

# SECURECORE TIANO™ DELIVERS THE BEST END USER EXPERIENCE



Innovation at the CORE™

Phoenix SecureCore Tiano™ is a new, advanced implementation of the industry-standard Tiano architecture that is UEFI compatible and is the finest implementation of Tiano in the world.

The de facto reference standard for the industry, SecureCore Tiano implements the UEFI 2.0 specification to support UEFI 2.0 through UEFI 2.2 operating systems, UEFI applications, and third-party UEFI component drivers. SecureCore Tiano supports the UEFI PI 1.2 specification to support platform initialization modules from silicon vendors.

SecureCore Tiano's advanced technology includes an integrated microkernel that multithreads the entire system to achieve its boot time edge, dynamic linking to reduce the system's ROM footprint, virtualization and SMM execution compartmentalization for security and reliability, centralized configuration management for providing ODM and OEM customers with total control over the system's policies, and a trusted computing base for managing security in the system comparable to the Common Criteria EAL3 level.

SecureCore Tiano delivers the best end user experience by offering:

- Highest Reliability
- Modular Architecture
- Compliance with GreenH and UEFI
- Fastest Boot

## HIGHEST RELIABILITY

SecureCore Tiano delivers the best end user experience by providing highest reliability in the industry. SecureCore Tiano includes an insulating layer above the Foundation (Green H) that keeps potentially errant plug-ins and adaptation code from incorrectly calling the Foundation's services. The result is highly reliable code that works every time.

- SecureCore Tiano offers Phoenix customers the most reliable firmware in the world, where reliable means "no unexpected or unwanted behavior." This can include unexpected crashes and slow booting, but it goes beyond that to handle the details of what is going on, without forcing the user to start second-guessing the system. This is what Embedded Simplicity is all about.
- SecureCore Tiano will not expose its inner workings to end users except when Phoenix OEMs explicitly do so at their own risk.
- SecureCore Tiano won't boot the same way 99 times out of 100 and force the user to do something different on that 100th boot.
- SecureCore Tiano won't hang when hardware is turned off or is missing, and it will not try to boot something that the user doesn't want it to boot. For example, just because an iPod is plugged into a USB port, doesn't mean that SecureCore Tiano should try to boot from it, as do many desktop PCs today.
- SecureCore Tiano won't have dramatically different response times or bad response times for different user-level options.
- SecureCore Tiano will even attempt to smooth over behaviors traditionally thought to be outside the realm of BIOS, including making Windows work better, handling hardware when it starts to fail, and getting smart about data security and hardware security.

SecureCore Tiano will just work, always.

## MODULAR ARCHITECTURE

Although based on Tiano and compatible with the latest UEFI standards, SCT incorporates the world's most productive build environment that supports multiple projects and versions of those projects within the same directory tree. Its solid organization, both architecturally and in the SDK's development tree, provides a fifteen-year architecture that customers can count on to lead their industry with highly competitive products

Phoenix customers have access to the most sophisticated and comprehensive solution for innovation encompassing the entire development cycle. Our SecureCore Tiano product, along with our leading edge tools framework can help businesses by:

- Cutting customer time to production
- Lowering costs
- Facilitating an environment of innovation for OEMs and ODMs.

Our customers will have more time to focus on innovation and differentiation.

## COMPLIANCE WITH GREEN H AND UEFI

SecureCore Tiano can improve the efficiency of your operations because it is both fully Green H compliant and fully UEFI compliant. It uses the pristine version of the Intel MPG Green H, including variations that Intel may supply in the future. And SecureCore Tiano follows the industry's UEFI standards, including PI standards. Intel will evolve the Green H over time, and as it does, SecureCore Tiano will always track it. Customers will be assured they are always working with the right version of the Green H because they work with SecureCore Tiano.

## FASTEST BOOT

The temptation for customers to try to make their platform boot faster by modifying the Foundation (Green H) code is hard to resist. But because SecureCore Tiano already boots fast while using the pristine Intel Foundation, there is no reason for customers to consider this.

SecureCore Tiano also offers end users with the fastest boot in the industry. Around the start of 2009, the typical Tiano POST time was measured at around 5 seconds. SecureCore Tiano is able to achieve sub-second POST times when not restricted by OEM hardware choices. SecureCore Tiano will boot faster than its competition, always.