



# 无锡力捷丰科技有限公司

OPTEEQ TECHNOLOGIES (WUXI) CO., LTD.

领先的集成电路高速烧录产品及解决方案  
Leading Solutions to High Speed IC Programming



30 May - 06 Jun, 2019  
Shanghai, Beijing, Shenzhen

意法半导体汽车微控制器技术日  
STMicroelectronics Automotive MCU Technical Day



- ✓ 专注于半导体芯片及电路板在线烧录、测试与自动化设备  
Specialized in On-board IC Programming & Testing Solutions
- ✓ 2010年成立的高科技企业，总部位于无锡国家传感网创新示范区  
Founded in 2019, Headquartered in CMP, Wuxi City
- ✓ 提供最优、最快和高品质的产品与服务  
To Provide Optimal, Speedy, High Quality Products & Services
- ✓ 通过持续创新帮助客户解决产品生命周期中的挑战  
To Help Customers Overcome the Challenges in Products' Life Cycle



# Why OPTEEQ S Series



- ✓ 超高的编程速度，是目前市场上最快的在线烧录引擎 --- 独创的核心硬件和软件设计，充分发挥目标芯片的烧录潜能!
- ✓ Powered by Unique Ultra High-speed Programming Engine



# Why OPTEEQ S Series

- ✓ 超高的编程速度 —— 独创的核心硬件和软件设计，充分发挥目标芯片的烧录潜能  
Ultra high-speed ---- unique hardware core & software design to reach IC' s full programming potential
- ✓ 支持4/8路并行烧录 —— 真正的4/8路物理烧录通道，大大提高产能  
4/8 way parallel programming ---- true 4/8 physical programming channels to remarkably improve the productivity
- ✓ 通用型编程器 —— 支持数十个半导体公司的数万种器件  
Universal programmer ---- to support tens of thousands of ICs from various manufactures
- ✓ 嵌入式应用 —— 能够方便、快速地与各种测试设备（如ATE、ICT、FCT等）相结合  
Integration friendly ---- can be easily integrated into testing equipment (ATE, ICT, FCT, etc.)
- ✓ 能够完全脱机工作 —— 应用灵活，方便手工操作  
Stand-alone mode ---- suitable for manual operation
- ✓ 外形紧凑 —— 能够方便地嵌入各种夹具、治具和工装  
Compact size ---- easy to fit into fixtures or other equipment
- ✓ 高稳定性和高可靠性 —— 经过严苛的测试和众多客户的使用，保证产品的稳定可靠  
Highly stable and reliable ---- strictly tested to ensure stable and reliable operation in manufacturing environment



- ✓ 编程接口: JTAG、SWD、BDM、DAP, UART、SPI、I2C、C2等  
Programming Interface: JTAG, SWD, BDM, DAP, UART, SPI, I2C, C2, etc.
- ✓ 所有I/O接口带有保护 All I/Os with protection
- ✓ 所有I/O接口的电压可编程调节 (1.65V - 5.5V) Adjustable voltage for all I/Os (1.65V - 5.5V)
- ✓ 输入电压: 9 - 24伏 (直流) Input voltage: 9 -24V (DC)
- ✓ 支持SD卡扩展, 最大支持16GB SD card expandable, up to 16 GB
- ✓ 支持通过扩展I/O与各种外部设备 (ATE、ICT、FCT、控制板、PC等) 相连  
Connect to external equipment (ATE, ICT, FCT, Control Board, etc.) through I/Os
- ✓ 带有光电隔离控制信号 Control signals are opto-isolated
- ✓ 带有光电隔离的烧录状态指示信号 Status signals are opto-isolated
- ✓ 支持通过USB或以太网与上位机联机 USB or Ethernet connection with a computer
- ✓ 全金属外壳设计, 具有优越的信号屏蔽 (EMI/EMC) 特性  
Full metal enclosure with excellent EMI/EMC features
- ✓ 每一路烧录信号均配有专用地线, 抗干扰能力强  
Exclusive grounding wire for each programming signal to ensure feature



# 软件特点 Software Features

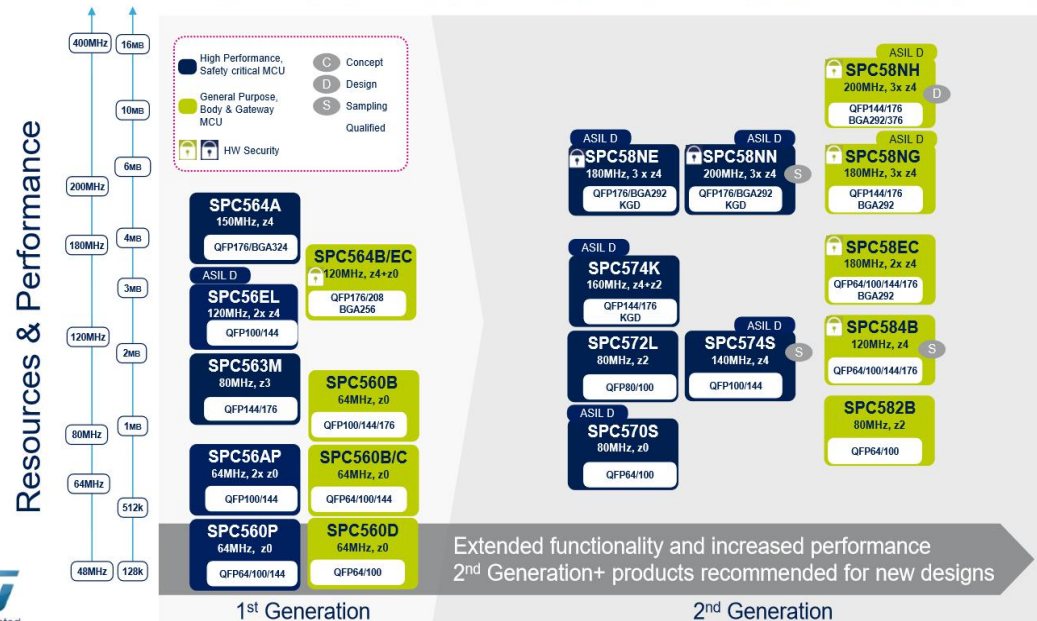
- ✓ 上位机软件可在Windows XP/Vista/7/8/10运行 Operating Systems: Windows XP/Vista/7/8/10
- ✓ 中文版/英文版可选 English/Chinese versions
- ✓ 提供DLL供外部软件扩展  
DLL for external software expansion
- ✓ 能够方便地进行固件升级  
Easy firmware upgrade
- ✓ 烧录过程自动生成日志文档  
Programming log
- ✓ 软件可设置擦除、空片检查、烧录、读出、校验、晶振trimming等  
Erase, blank check, program, verify, etc. can be configured by software



# Support for ST SPC5 Microcontrollers

- ✓ 支持全系列的ST SPC5微控制器 ( SPC56xx、 SPC57xx、 SPC58xx)  
Full support to SPC5 microcontrollers ( SPC56xx, SPC57xx, SPC58xx)
- ✓ 支持烧录SPC5的各种Flash 类型及所有区域 Programming to all flash types and areas (PFlash, DFlash, HSMPFlash, HSMDFlash, UTEST, BAF)
- ✓ 高级功能, 如: 修改生命周期、JTAG 加密、修改DCF等  
Support advanced features, e.g., life cycle configuration, JTAG protection, change DCF, etc.
- ✓ 支持硬件加密模块 (HSM) 的操作, 如: 启动/关闭、动态密钥注入\*、等等  
Support to hardware security modules (HSM) feature, e.g., enable/disable HSM, dynamic key loading\*, etc.
- ✓ 烧录器支持全流程的IP保护功能\*  
Programmiers with full IP protection function\*

\* 根据客户需求提供  
On customer request





- ✓ 提供完善的中英文产品手册、操作说明等一系列技术资料，帮助用户方便、快捷地掌握产品的操作和使用方法。

To provide complete User Manual, Operation Description, etc. for easy and quick use of our product.

- ✓ 通过电话支持热线、电子邮件以及微信、QQ等即时沟通工具，全方位地随时为客户解决产品使用过程中遇到的各种问题。

To support our customer by telephone hotline, service E-mail, WeChat, QQ, etc., to answer questions and resolve problems.

- ✓ 在最短的时间内帮助客户处理其遇到的问题，7X24，全年无休。

We do our best to resolve problems in the least time, 7x24, 365days.

- ✓ 自产品购买日起两年内，我们为产品提供质量保证。

We provide 2 years warranty from the date of purchase.



- ✓ 销售电话 Tel.: 0510-81813667
- ✓ 销售邮箱 E-mail: [contact@opteeq.com.cn](mailto:contact@opteeq.com.cn)
- ✓ 技术支持邮箱 Support E-mail: [support@opteeq.com.cn](mailto:support@opteeq.com.cn)
- ✓ 网站 Website: <http://www.opteeq.com>

# Thanks!

