

Chip Speeds Time-to-Market and Transaction Processing Time for VeriFone POS Terminals

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Based in San Jose, California, VeriFone, Inc. (NASDAQ: PAY) is a global leader providing secure electronic payment technologies. The company's solutions enable secure electronic payment transactions and value-added services at the point of sale. The result is improved merchant retention and the generation of new sources of revenue for its partners and customers – primarily global financial institutions, payment processors, petroleum companies, large retailers, government organizations and healthcare companies.

VeriFone's solutions are able to process a wide range of payment types, including signature and PIN-based debit cards, credit cards, smart cards, signature capture and electronic benefits transfer (EBT). The company's point-of-sale (POS) terminals are designed to support a wide range of interchangeable communications modules.

The Challenge

VeriFone began designing their first Internet Protocol (IP)-enabled communication module shortly after the introduction of the modular Omni 3750 terminal. Their engineers struggled for many months with internally developed TCP/IP stacks and began to assess the integration effort with a commercially available TCP/IP library, when Doug Manchester, then VeriFone's IP Program Manager, started to evaluate iChip. Doug quickly determined that iChip met VeriFone's requirements. It was the fastest, most reliable and practical solution to embed Ethernet connectivity in the Omni 3750. With customers anxiously awaiting delivery of an IP solution, Doug decided to use iChip to offload TCP/IP tasks from the Omni 3750's main processor. Within one month, Doug's team produced a working prototype with iChip onboard. Full-scale production began four months later.



iChip-enabled communication module

Application Note

According to Doug, Connect One's expertise in Internet Protocol solutions filled the holes in VeriFone's understanding of IP connectivity and offered VeriFone unequalled adaptability. "Connect One has an unmatched wealth of experience and the broadest outlook of any of the IP connectivity vendors that we evaluated," Doug said. "I got the benefit of Connect One's learning curve without having to pay for it."

The iChip Advantage

As a result of selecting iChip, VeriFone has become the leading manufacturer of POS terminals for LAN and WiFi access. They have maintained very high market share for these products since their first customer shipments of iChip-enabled terminals, while their competitors still lag far behind.

VeriFone started evaluating Connect One's WiFi chip after customers requested 802.11b Wireless LAN access. Within one month a working prototype was produced, and a few months later, a WiFi module was released for the Omni 3750. Based on the success of the Omni 3750, VeriFone announced the introduction of a portable, battery-powered terminal which uses iChip for WiFi access.

In recognition of its innovative payment transaction solutions and value added services at the point of sale, VeriFone became the first winner of the Frost & Sullivan Product Line Strategy Leadership Award in the EFT POS industry segment. Frost & Sullivan is recognized as a global marketing research and solution leader.

Frost & Sullivan said that VeriFone "demonstrated superior insight into customer needs and product demands." They cited VeriFone's Enhanced Communications product line, saying "VeriFone is consolidating its industry position through a comprehensive line of EFT POS solutions that use reliable wireless and IP-based communications. These solutions support IP-based CDMA, GPRS and WiFi technologies for secure, 'always on' connectivity."

Application Note