



Intel[®] 82579 Gigabit Ethernet Controller Features Software Support

Application Note v1.3

March 2012



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Revision History

Date	Revision	Description
May 2011	1.0	Initial release.
August 2011	1.1	Clarified Jumbo packet information.
March 2012	1.2	Classification preparation; internal release only.
March 2012	1.3	Updated OS support table.



The following tables include:

Table 1: features of the Intel® 82579 Gigabit Ethernet Controller and the operating system support (if any)

Table 2: the operating systems/architecture support

Legend:
 Yes= support is provided by the Intel driver
 No= support is not provided by the Intel driver
 N/A= Not supported by the Intel® 82579 GbE Controller

Table 1. Feature/Operating System Support

Feature	Windows* INF Name: (E1C)	Linux* OS Driver name: e1000e
Device ID: 1502 and 1503	1 Gb/s full-duplex, 10/100 Mb/s full and half duplex	1 Gb/s full-duplex, 10/100 Mb/s full and half duplex
Link Flow Control	Yes	Yes
Receive Buffers	256, 512, 1024 and 2048	256, 512, 1024 and 2048
Checksum Offload	Yes (IPv4/IPv6, TCP, UDP, TX/RX)	Yes (IPv4/IPv6, TCP, UDP, TX/RX)
Large Send Offload (TSO)	Yes--Up to 64 KB	Yes--Up to 64 KB
Interrupt Moderation Rate	Yes (supports Static and AIM (Adaptive Interrupt Moderation))	Yes (supports Static and Dynamic Interrupt Moderation)
Message Signaled Interrupts (MSI)	Yes	Yes
Message Signaled Interrupts (MSI-X) Number of vectors	Yes--10 vectors	Yes--10 vectors
Header Data Split	No	No
Jumbo Packet	Yes‡ (9014 bytes)	Yes (9014 bytes)
Receive Side Scaling	Yes (Receive and Transmit Scaling)	Yes
RSS Receive Queues	2	2
Wake from S1 –S4	Yes	Yes
Wake from S5	Yes	Yes
Teaming	Yes	No (Supported by channel bonding in kernel)
Virtualization (SR-IOV)	N/A	N/A
VMDq2†	No	No
Receive Side Coalescing	No	TCP only, done in SW
IEEE 1588 *	No	No
802.1Q and 802.1p	Yes	Yes
Link Speed Battery Saver	Yes	Yes
EEE (Energy Efficient Ethernet)	Yes	Yes
MacSec	Yes	Yes

† Supported in Intel® 82579LM SKU only.
 ‡ Supported only in 1 Gbps mode



Table 2. Operating System/Architecture Support

Operating System	Kernel (if applicable)	IA32	X64	IPF
Windows XP* Professional SP3		Yes	Yes	
Windows Vista* SP2		Yes	Yes	
Windows 7*		Yes	Yes	
Windows Server 2003 SP2*†		Yes	Yes	
Windows Server 2008 SP2*†		Yes	Yes	
Windows Server 2008 SP2 Core*†		Yes	Yes	
Windows Server 2008 R2*†		N/A	Yes	
Windows Server 2008 R2 Core* †		N/A	Yes	
Linux Stable Kernel* version 2.6/3.x	3.1	Yes	Yes	N/A
Linux RHEL 5.8*	2.6.18-307.el5	Yes	Yes	Yes
Linux RHEL 6.2*	2.6.32.220.el6	Yes	Yes	N/A
Linux SLES 10 SP4*	2.6.16.60-0.85.1	Yes	Yes	NA
Linux SLES 11 SP2*	3.0.13-0.27	Yes	Yes	Yes
FreeBSD 9	9.0	Yes	Yes	N/A
DOS NDIS* 2		Yes	N/A	
DOS ODI*		Yes	N/A	
EFI 1.1*		N	N/A	
uEFI 2.1*		N	Yes	

† Supported in Intel® 82579LM SKU only.