



Intel[®] 82580EB/82580DB GbE Controller Feature Software Support

LAN Access Division (LAD)

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Revisions

Rev	Date	Comment
0.5	04/01/2008	Initial Outline.
0.6	05/30/2008	Update with details on all sections
0.7	06/19/2008	Update based on feedback
0.9	07/10/2008	Update based on review feedback
1.0	03/13/2009	Update TPH/LTR/DMA Coalescing sections
1.1	11/7/2011	Updated.
1.2	3/6/2012	Updated driver reference.
1.3	3/14/2014	Linux OS data updated. Header split feature removed from Windows*.



NOTE: *This page intentionally left blank.*



1.0 Features Supported by Software

The following two tables detail feature and operating system support provided by software driver release 16.81. Feature support for releases after this point are consistent.

Table 1-1. Features

Features	Windows* Driver name: e1r See Note. ¹	Linux* Driver name: igb See Note. ¹
Link Modes		
MDI(Copper) Device ID: 150E	1Gb/s full-duplex, 10/100 Mb/s full and half duplex.	1Gb/s full-duplex, 10/100 Mb/s full and half duplex.
1G SerDes BX/KX Device ID: 1510	Yes	Yes
1G SerDes Fiber Device ID: 150F	Yes	Yes
SGMII Device ID: 1511	No	Yes
Link Flow Control	Yes	Yes
Receive Buffers	Yes (256, 512, 1024 and 2048 bytes)	Yes (256, 512, 1024 and 2048 bytes)
Checksum Offload	Yes (IPv4/IPv6,TCP,UDP,TX/RX)	Yes (IPv4/IPv6,TCP,UDP,TX/RX)
Large Send Offload (TSO)	Yes - Up to 64KB	Yes - Up to 64KB
SCTP receive and transmit checksum offload	N/A	Yes
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)	Yes (10 vectors)	Yes (10 vectors)
IPSec	N/A	N/A
Header Data Split	No	Yes
Jumbo Packet	Yes(9014 bytes)	Yes(9014 bytes)
Receive Side Scaling	Yes (Receive and Transmit Scaling)	Yes
RSS Receive Queues	1-8	1-8
OS2BMC	N/A	N/A
Wake from S1 –S4	Yes	Yes
Wake from S5	Yes	Yes



Table 1-1. Features (Continued)

DCB	N/A	N/A
Teaming	Yes.	No (Supported by channel bonding in kernel)
Virtualization (SR-IOV)	N/A	N/A
VMDq2	Yes	Yes
FCoE	N/A	N/A
Receive Side Coalescing	No	TCP only, done in SW
IEEE 1588	N/A	Yes (kernel 2.6.30 and later)
MacSec	N/A	N/A

Note:

- 1. Yes = Support provided in the driver
- No = No Support provided in the driver
- N/A = Not supported in 82580 silicon

Table 1-2. Operating Systems

Operating System	Kernel	IA32	X64	IPF ¹
Windows* XP Professional SP3		Y	Y	n/a
Windows Vista SP2		Y	Y	n/a
Windows 7		Y	Y	n/a
Windows Server 2003 SP2		Y	Y	Y
Windows Server 2008 SP2		Y	Y	Y
Windows Server 2008 SP2 Core		Y	Y	n/a
Windows Server 2008 SP2 (w/ Hyper-V* role)		n/a	Y*	n/a
Hyper-V Server 2008 SP2		n/a	Y*	n/a
Windows Server 2008 R2		n/a	Y	Y
Windows Server 2008 R2 Core		n/a	Y	Y



Table 1-2. Operating Systems (Continued)

Windows Server 2008 R2 (w/ Hyper-V role)		n/a	Y*	n/a
Hyper-V Server* 2008 R2		n/a	Y*	n/a
Linux* Stable Kernel version 2.6/3.x	3.1	Y	Y	N/A
Linux RHEL 5.8	2.6.18-307.el5	Y	Y	Y
Linux RHEL 6.2	2.6.32.220.el6	Y	Y	N/A
Linux SLES 11 SP2	3.0.13-0.27	Y	Y	Y
Linux SLES 10 SP4	2.6.16.60-0.85.1	Y	Y	N/S
FreeBSD 9	9.0	Y	Y	N/A
SCO* OpenServer 5.0.7 and 6.0 ⁴		Y	n/a	n/a
DOS* NDIS2		Y	n/a	n/a
DOSODI*		Y	n/a	n/a
EFI* 1.1		N	n/a	Y
UEFI* 2.1		N	Y	Y
Vmware* <ul style="list-style-type: none"> • ESX4.0i³ • ESX4.1i³ • ESX5.0i³ 		n/a	Y	n/a

Notes:

1. Itanium® Product Family
2. Minimal validation
3. VMware* ESX drivers are not included on LAD SW Releases, they are only available from VMware's web site and they are released on a separate schedule.
4. Driver provided through OS vendors.



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