

DAVICOM DM9000A Series_vs_SMSC 911X 10/100Mbps MAC+PHY non-PCI Ethernet Controller Comparison

FEATURE	DAVICOM DM9000AE	DAVICOM DM9010E	DAVICOM DM9000E	SMSC LAN9115	SMSC LAN9116	SMSC LAN9117	SMSC LAN9118	SMSC LAN91C111
Pins count	48	100	100	100	100	100	100	128
Auto-MDIX Ethernet Transceiver	Yes	Yes	Not Support	Not Support	Not Support	Not Support	Not Support	Not Support
IP/TCP/UDP Checksum Offload	Yes	Yes	Not Support	Not Support	Not Support	Not Support	Not Support	Not Support
IOR/IOW width (min.)	10ns	10ns	22ns	32ns	32ns	32ns	32ns	30ns
Power Dissipation Active Max	92ma	92ma	100ma	128ma	128ma	128ma	128ma	140ma
GPIO	Yes(6pins)	Yes(7or23pins)	Yes(4pins)	Yes(3pins)	Yes(3pins)	Yes(3pins)	Yes(3pins)	Yes(2pins)
Processor Data bus 8 bit	Yes	Yes	Yes	Not Support	Not Support	Not Support	Not Support	Yes
Processor Data bus 16 bit	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Processor Data bus 32 bit	Not Support	Yes	Yes	Not Support	Yes	Not Support	Yes	Yes
External PHY Via MII Interface	Not Support	Yes	Yes	Yes	Not Support	Yes	Not Support	Not Support
100Base-FX	Yes	Yes	Yes	Not Support	Not Support	Not Support	Not Support	Not Support
Reverses MII	Not Support	Yes	Yes	Not Support	Not Support	Not Support	Not Support	Not Support
Buffer Memory (bytes)	16K	16K	16K	16K	16K	16K	16K	8K
Direct Memory Access Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Internal PHY 10/100Mbps MII	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Multiple Programmable IRQ	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Multiple IO Base Address	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
CIS Eeprom	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10baseT (10Mbps) H- Full	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
100Base-TX(100Mbps) H-Full	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Programmable LED display	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IEEE802.3 Flow Control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Wakeup Frame, Link Status	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Magic Packet remote wake up	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Auto-Negotiation	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Low Power CMOS design	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Asynchronous mode	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adaptive Equalization	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
On Chip Wave Shaping	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clock Recovery	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Enhanced Power Management	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3.3/2.5V Operation with 5V Tolerant IO Buffers	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reference Clock	25MHZ	25MHZ	25MHZ	25MHZ	25MHZ	25MHZ	25MHZ	25MHZ
Diagnostic support	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Support Multiple Embedded Processor Host Interfaces	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Support Commercial Temperature	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Build-in Regulator	3.3/2.5V	3.3/2.5V	none	3.3/1.8V	3.3/1.8V	3.3/1.8V	3.3/1.8V	none