ADAM-6052 16 channel Source Type Digital Input/Output Module

The ADAM-6052 is a high-density digital I/O module designed with a 10/100 based-T interface for seamless Ethernet connectivity. It provides 8 digital input channels, and 8 digital output channels. All of the digital input channels support the input latch function for important signal handling. The digital output channels support source type output.

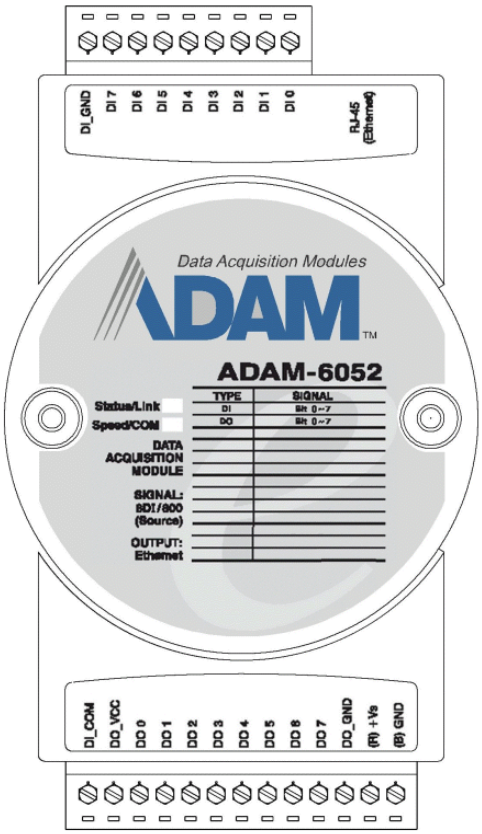

Fig. 1 ADAM-6052 16 channel Source Type Digital Input/Output Module

I/O Type : 8 DI/ 8 DO

Digital Input :

Dry Contact :

Logic level 0 : Close to GND

Logic level 1 : Open

Wet Contact :

Logic level 0 : +3 Vmax

Logic level 1 : +10 to 30 Vdc

Digital Output :

Source Type : 24Vdc, 1 A

Optical Isolation : 2000 V_{DC}

Power requirements : Unregulated +10 ~ +30 V_{DC}

Power consumption : 2 W

Application Wiring

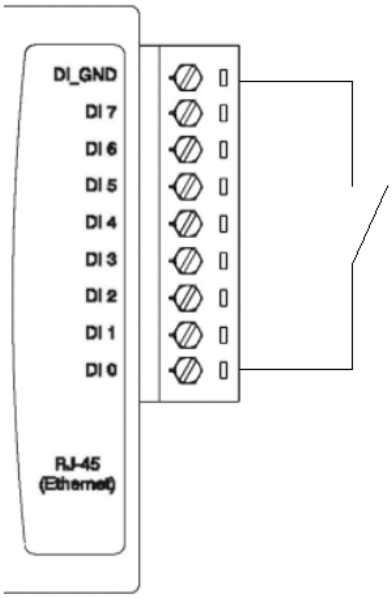

Fig. 2 ADAM-6052 Digital Input Wiring (Dry Contact)

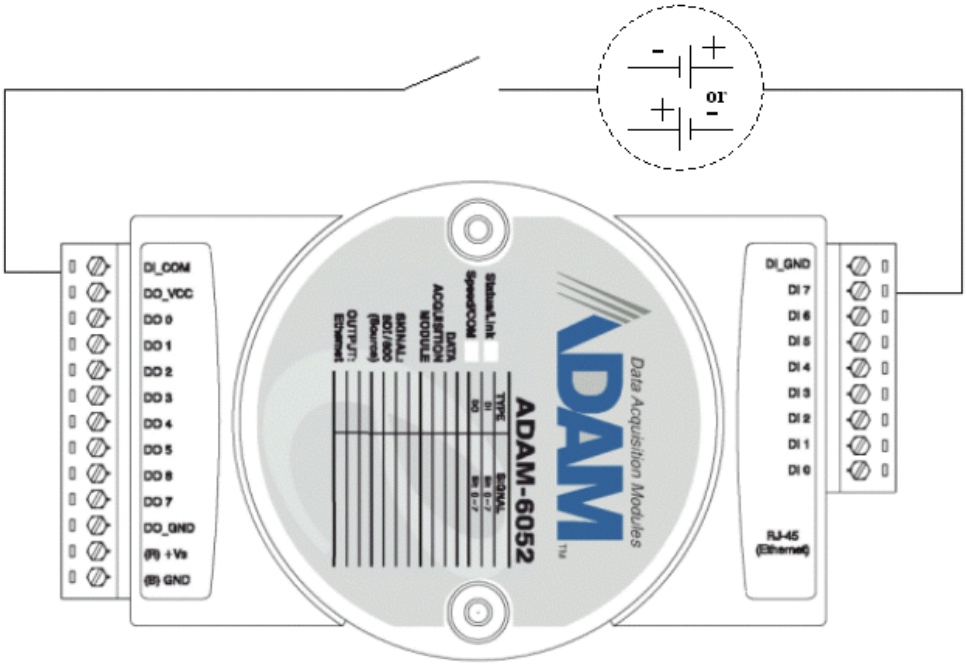

Fig. 3 ADAM-6052 Digital Input Wiring (Wet Contact)

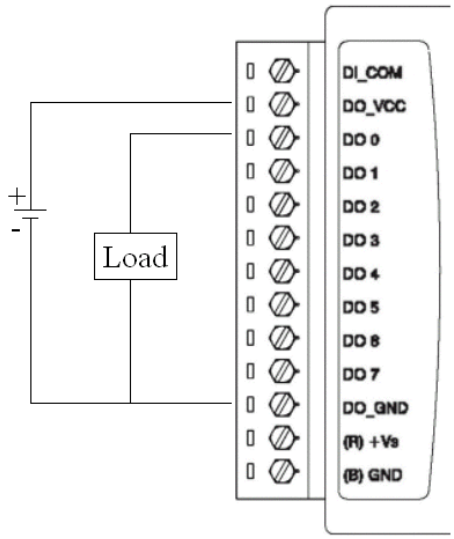

Fig. 4 ADAM-6052 Digital Output Wiring

Assigning addresses for ADAM-6052 Modules

Based on the Modbus/TCP standard, the addresses of the I/O channels in ADAM-6000 modules you place in the system are defined by a simple rule. Please refer to Figure 5 to map the I/O addresses.

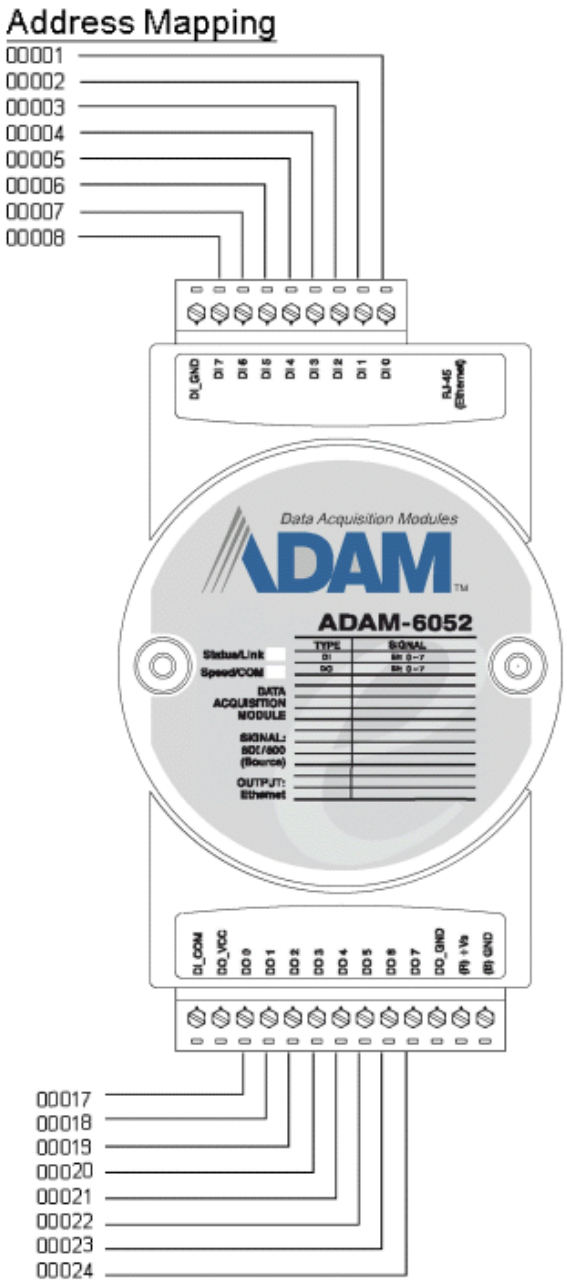

Fig. 5 ADAM-6052 Digital Input/Output MODBUS Mapping Address

Assigned addresses for the ADAM-6052 Modules

	ADDR 0X	CH	ITEM	Attribute	ADDR 4X	CH	ITEM	Attribute
	00001	0	DI	R	40001~40002	0	*Counter	R
	00002	1	DI	R	40003~40004	1	*Counter	R
	00003	2	DI	R	40005~40006	2	*Counter	R
	00004	3	DI	R	40007~40008	3	*Counter	R
	00005	4	DI	R	40009~40010	4	*Counter	R
	00006	5	DI	R	40011~40012	5	*Counter	R
	00007	6	DI	R	40013~40014	6	*Counter	R
	00008	7	DI	R	40015~40016	7	*Counter	R
	00017	0	DO	R/W	40017~40018	0	Pulse Output Low Level	R
	00018	1	DO	R/W	40019~40020	1	Pulse Output Low Level	R
	00019	2	DO	R/W	40021~40022	2	Pulse Output Low Level	R
	00020	3	DO	R/W	40023~40024	3	Pulse Output Low Level	R
	00021	4	DO	R/W	40025~40026	4	Pulse Output Low Level	R
	00022	5	DO	R/W	40027~40028	5	Pulse Output Low Level	R
	00023	6	DO	R/W	40029~40030	6	Pulse Output Low Level	R
	00024	7	DO	R/W	40031~40032	7	Pulse Output Low Level	R
	00033	0	Counter Start(1)/Stop(0)	R/W	40033~40034	0	Pulse Output High Level	R
	00034	0	Clear Counter(1)	R/W	40035~40036	1	Pulse Output High Level	R
	00035	0	Clear Overflow	R/W	40037~40038	2	Pulse Output High Level	R
	00036	0	Latch Status/ Clear Status	R/W	40039~40040	3	Pulse Output High Level	R
	00037	1	Counter Start(1)/Stop(0)	R/W	40041~40042	4	Pulse Output High Level	R
	00038	1	Clear Counter(1)	R/W	40043~40044	5	Pulse Output High Level	R
	00039	1	Clear Overflow	R/W	40045~40046	6	Pulse Output High Level	R
	00040	1	Latch Status/ Clear Status	R/W	40047~40048	7	Pulse Output High Level	R

	00041	2	Counter Start(1)/Stop(0)	R/W				
	00042	2	Clear Counter(1)	R/W				
	00043	2	Clear Overflow	R/W	40049~40050	0	Set Absolute Pulse (0=Continue Mode)	R
	00044	2	Latch Status/ Clear Status	R/W	40051~40052	1	Set Absolute Pulse (0=Continue Mode)	R
	00045	3	Counter Start(1)/Stop(0)	R/W	40053~40054	2	Set Absolute Pulse (0=Continue Mode)	R
	00046	3	Clear Counter(1)	R/W	40055~40056	3	Set Absolute Pulse (0=Continue Mode)	R
	00047	3	Clear Overflow	R/W	40057~40058	4	Set Absolute Pulse (0=Continue Mode)	R
	00048	3	Latch Status/ Clear Status	R/W	40059~40060	5	Set Absolute Pulse (0=Continue Mode)	R
	00049	4	Counter Start(1)/Stop(0)	R/W	40061~40062	6	Set Absolute Pulse (0=Continue Mode)	R
	00050	4	Clear Counter(1)	R/W	40063~40064	7	Set Absolute Pulse (0=Continue Mode)	R
	00051	4	Clear Overflow	R/W				
	00052	4	Latch Status/ Clear Status	R/W				
	00053	5	Counter Start(1)/Stop(0)	R/W				
	00054	5	Clear Counter(1)	R/W				
	00055	5	Clear Overflow	R/W				
	00056	5	Latch Status/ Clear Status	R/W				
	00057	6	Counter Start(1)/Stop(0)	R/W				
	00058	6	Clear Counter(1)	R/W				
	00059	6	Clear Overflow	R/W				
	00060	6	Latch Status/ Clear Status	R/W				
	00061	7	Counter Start(1)/Stop(0)	R/W				
	00062	7	Clear Counter(1)	R/W				
	00063	7	Clear Overflow	R/W				
	00064	7	Latch Status/ Clear Status	R/W				

Note : How to retrieve the counter/frequency value on Modbus address mapping

Example :

Counter(dec) = (value of 40002) x 65535 + (value of 40001)

Frequency(dec) = (value of 40001)/10 Hz