

A2060 — ARCNET CONTROLLER FOR A2000

DIMENSIONS:	13.25 x 4.5 inches
WEIGHT:	1 lb.
ENVIRONMENTAL:	0C to 70C Operating
POWER REQUIREMENTS:	+5V @ 1.75A max -5V @ 0.27A max
INCLUDES:	• A2060 PCB • BNC "T" connector • BNC to BNC cable (2 meter) • 93 ohm network terminator
FEATURES:	• Support of ArcNet bus protocol (uses HIT module) • Socket for optional network Autoboot ROM • Novelle netware software optionally available

ARCNET HAS THE FOLLOWING FEATURES:

- Allows up to 256 nodes
- Maximum distance of 2000 feet between nodes
- Data rate of 2.5 Mbps

GENERAL DESCRIPTION

The A2060 is an ARCNET controller designed for use with the A2000 computer. ARCNET is a local area network utilizing a self-polling "modified token passing" scheme operating at a 2.5 Mbit data rate. A "modified token passing" scheme is one in which all token passes are acknowledged by the node accepting the token. The token passing network avoids the fluctuating channel access times caused by data collisions in so-called CSMA/CD schemes such as Ethernet.

The A2060 plugs into one of the 100 pin expansion slots in the A2000. The BNC plug on the rear of the A2060 connects to the network in daisy chain fashion with the special "T" connector and BNC to BNC cable included. Note that most network installations will require additional cabling and active links, and that network software is not included.

ENVIRONMENTAL TEST REQUIREMENTS

Units shall comply with the following environmental resistance requirements.

TEMPERATURE

Operational	5 to 55°C
Storage	-20 to +70°C
Gradient	+10°C/hour
Temperature Cycle	-20 to 60° C, 10 cycles, 10 minutes minimum at each extreme, 5 minutes maximum between extremes

HUMIDITY

Operational (relative)	10 to 90% (non-condensing)
Storage (relative)	5 to 95% (non-condensing)

VIBRATION

Non-operating (random frequency)	5.2 Gs per MIL-STD 202 Method 214, 15 min. in each of three axes
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SHOCK

Operational	5 Gs to each of 6 axes, two 11 mSec half sinewave shocks
Non-Operational	20 Gs applied as above

ALTITUDE

Operational	0 to 3000 meters
Non-Operational	0 to 15,000 meters

Commodore International Spare Parts List SHIPPING ASSEMBLIES

Commodore part numbers are provided for reference only and do not indicate the availability of spare parts from Commodore. Industry standard parts (Resistors, Capacitors, Connectors) should be secured locally. Part number information may vary according to country, some parts may not be available in all countries.

532060-01 A2060 SHIPPING ASSY (U.S.)	532060-04 A2060 SHIPPING ASSY (GERMANY)
363035-05 BOX BULK PACKING	363035-05 BOX BULK PACKING
363097-05 BOX PACKING	363097-05 BOX PACKING
318928-01 BAG PLASTIC CONDUCTIVE	318928-01 BAG PLASTIC CONDUCTIVE
363350-01 MANUAL USER A2060 (EFIGS)	363350-01 MANUAL USER A2060 (EFIGS)
318290-01 CARD WARRANTY U.S.	316846-01 LABEL UPC A2060
314877-04 SERVICE CENTER LIST (U.S.)	390627-01 CONNECTOR BNC "T"
316846-01 LABEL UPC A2060	390628-01 TERMINATOR BNC 93 OHMS
390627-01 CONNECTOR BNC "T"	312839-01 CABLE BNC 2 M LG.
390628-01 TERMINATOR BNC 93 OHMS	311661-01 PCB ASSY A2060, REV. 2
312839-01 CABLE BNC 2 M LG.	251006-01 BAG PLASTIC
311661-01 PCB ASSY A2060, REV. 2	
251006-01 BAG PLASTIC	532060-05 A2060 SHIPPING ASSY (EUROPE)
532060-02 A2060 SHIPPING ASSY (CANADA)	363035-05 BOX BULK PACKING
363035-05 BOX BULK PACKING	363097-05 BOX PACKING
363097-05 BOX PACKING	318928-01 BAG PLASTIC CONDUCTIVE
318928-01 BAG PLASTIC CONDUCTIVE	363350-01 MANUAL USER A2060 (EFIGS)
363350-01 MANUAL USER A2060 (EFIGS)	316846-01 LABEL UPC A2060
318882-01 CARD WARRANTY CANADA	390627-01 CONNECTOR BNC "T"
316846-01 LABEL UPC A2060	390628-01 TERMINATOR BNC 93 OHMS
390627-01 CONNECTOR BNC "T"	312839-01 CABLE BNC 2 M LG.
390628-01 TERMINATOR BNC 93 OHMS	311661-01 PCB ASSY A2060, REV. 2
312839-01 CABLE BNC 2 M LG.	251006-01 BAG PLASTIC
311661-01 PCB ASSY A2060, REV. 2	
251006-01 BAG PLASTIC	532060-06 A2060 SHIPPING ASSY (SCANDINAVIAN)
532060-03 A2060 SHIPPING ASSY (AUSTRALIA)	363035-05 BOX BULK PACKING
363035-05 BOX BULK PACKING	363097-05 BOX PACKING
363097-05 BOX PACKING	318928-01 BAG PLASTIC CONDUCTIVE
318928-01 BAG PLASTIC CONDUCTIVE	363351-01 MANUAL USER A2060 (SCAND)
363350-01 MANUAL USER A2060 (EFIGS)	316846-01 LABEL UPC A2060
318884-01 CARD WARRANTY AUSTRALIA	390627-01 CONNECTOR BNC "T"
316846-01 LABEL UPC A2060	390628-01 TERMINATOR BNC 93 OHMS
390627-01 CONNECTOR BNC "T"	312839-01 CABLE BNC 2 M LG.
390628-01 TERMINATOR BNC 93 OHMS	311661-01 PCB ASSY A2060, REV. 2
312839-01 CABLE BNC 2 M LG.	251006-01 BAG PLASTIC
311661-01 PCB ASSY A2060, REV. 2	
251006-01 BAG PLASTIC	

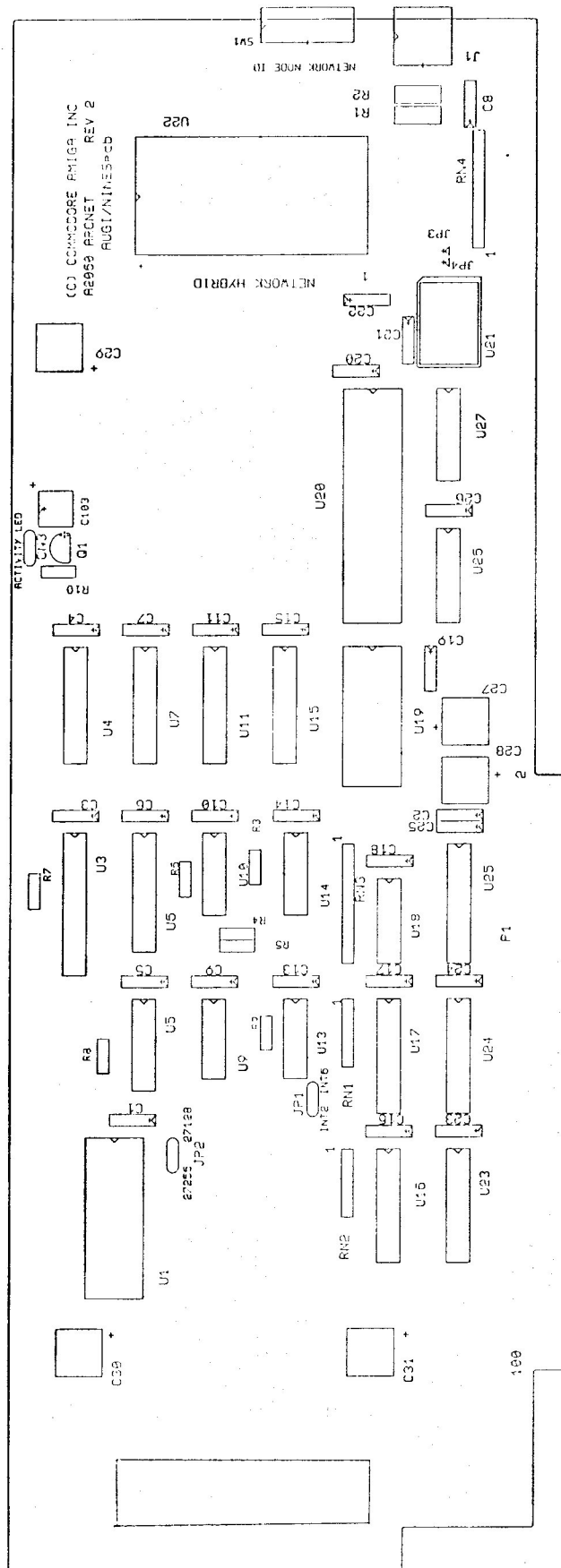
Commodore International Spare Parts List

PCB Components

PCB Assembly #311611-01

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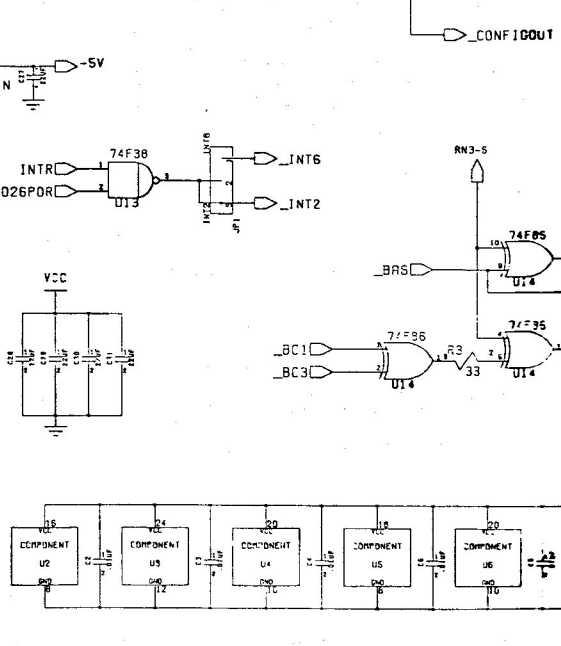
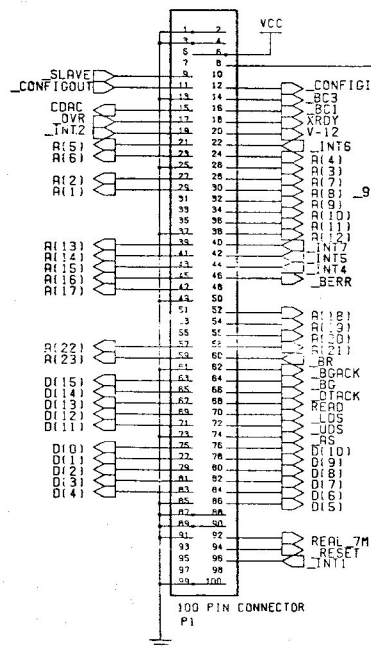
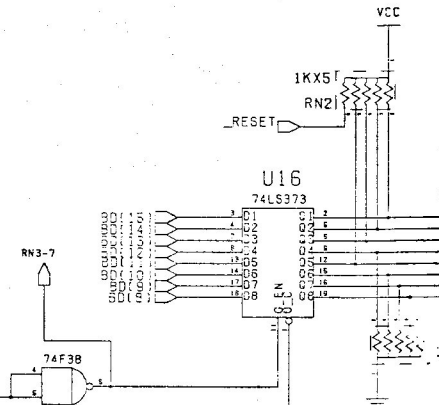
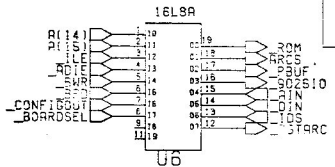
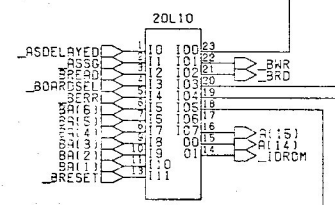
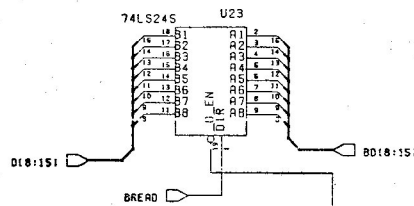
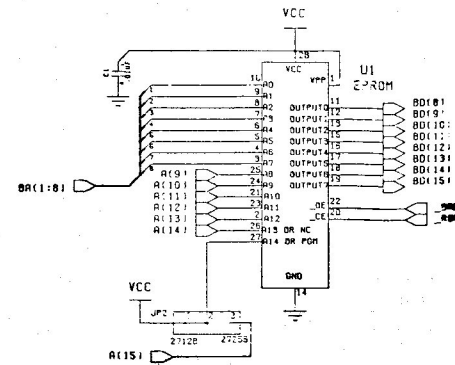
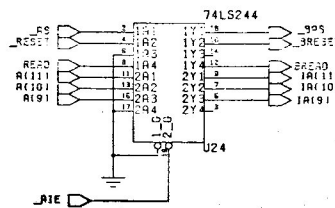
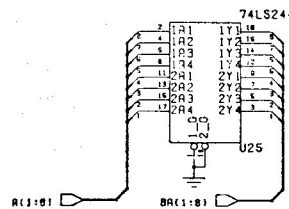
IC COMPONENTS			RESISTOR NETWORKS		
390554-01	16L8A PAL CONTROL 1	U6	902441-22	SIP 1K 6 PIN 2%	RN1,RN2
390553-01	20L10A PAL CONTROL 2	U3	902410-10	SIP 1K 10 PIN	RN3
390585-01	27C64-20 EPROM	U1	902410-07	SIP 10K 10 PIN	RN4
901521-13	74LS244	U4,U7,U24,U25	RESISTORS		
901521-29	74LS373	U11,U15	901550-105	CF 33 OHM 1/4W 5%	R3-R9
901521-31	74LS32	U18	901600-51	CF 5.6K 1/2W 5%	R1,R2
901521-34	74LS175	U5	901550-49	100 OHM 1/4W 5%	R10
901521-46	74LS245	U23	900101-51	2.2 UF ELEC RAD	C103
901521-71	74LS166	U26	CAPACITORS		
318041-01	74F521	U17	390082-04	CERM RAD .33UF 50 V	C1-C26
390081-01	74F74	U9,U10	900101-17	ELEC AXL 22 UF 35 V	C28-C31
390198-01	74F86	U14	390101-09	2.2UF ELEC. RAD	C103
390586-01	74F38	U13	CONNECTOR		
390575-01	LSI LAN COM90C26	U20	390673-01	CONNECTOR INSULATED BNC	J1
390576-01	LSI LAN TRANSCEIVER COM92C3	U27	MISCELLANEOUS		
390577-01	HYB9068 HIT HYBRID MODULE	U22	390363-02	SWITCH 8 POSITION DIP R/A	SW1
251637-03	MEM SRAM 2K X 8 BIT 120NS	U19	311665-01	OPTION CARD BRACKET	Q1 CN3
901521-43	74LS374	U16	906800-07	SCREW M3 X .5 X 4 (QTY 2) FOR OPTION CARD BRACKET	
325566-21	OSCILLATOR 20MHZ 50MA	U21	902707-01	TRANSISTOR 2N3906	
			903326-03	HEADER, 3 PIN SIL	
			316893-01	LABEL, FCC ID	
SOCKETS					
390060-01	DIP 24 PIN .3"	U3			
904150-02	IC L/P 16 PIN .3"	U27			
904150-04	IC L/P 24 PIN .6"	U19			
904150-05	IC L/P 28 PIN .6"	U1			
904150-06	IC L/P 40 PIN .6"	U20			
904150-08	IC L/P 20 PIN .3"	U6			



PCB BOARD LAYOUT #311661, REV. 2

Schematic #311662, Rev. 2

Sheet 1 of 1



A2060 SYSTEM SCHEMATICS

