*** ONE MEGABYTE EXTERNAL MEMORY INTERFACE FOR THE SAM COUPE **

The 1 Mb Interface plugs into the Coupe's rear expansion
connector (or into a SAMBUS slot) and extends the SAM Coupe's
memory capability by 1024 Kilobytes, whether you have a standard
256k machine or a 512k upgraded machine.

WARNING ! - NEVER plug/unplug any device into an expansion
connector while the Coupe is switched on. You may cause some
damage the computer and almost certainly cause any loaded
programs to "crash"

The SAM Coupe allows you to use up to 512k of internal RAM (256k
on standard machines) through SAM BASIC, but will not recognise
the external 1 Mb memory. You will need to use MasterDOS in
order to use the 1 Mb External Memory efficiently.

When MasterDOS is booted, it verifies the external memory
capability and includes it in the SAM Coupe's overall view of the
memory. However, it doesn't alter SAM BASIC to allow it to
use the external memory for writing a BASIC program, or to
access the external memory by using commands such as POKE and
PEEK.

One of the main advantages in having a 1 Mb External Memory
fitted is that it can be used as a second, third, fourth etc
RAMDISK drive. Future programmers when writing software, will
look for it to be configured into working memory to enable
programs such as databases to run more efficiently.

All of the standard disk commands can be used in MasterDOS on
the 1 Mb External Memory, and of course the access times are
much faster. Remember though that the 1 Mb memory is volatile,
and that any data stored there will be lost as soon as the SAM
Coupe is turned off.

On the 1 Mb printed circuit board there is a jumper connection
to allow a one from four position selection (which is factory
set to position four). This enables up to four 1 Mb External
Interfaces to be connected together giving a possible total
memory capability of a staggering 4.5 Megabytes of RAM
(4,718,592 bytes !!!)

The 1 Mb External Memory is controlled by two 8-bit registers
which are adressed by port 128 for the first PAGE (EXPAGE-C,
8000 hex to BFFF hex) and port 129 for the second PAGE
(EXPAGE-D, 0000 hex to FFFF hex). As you can see, when the
external memory is switched in, it replaces the top 32k of the
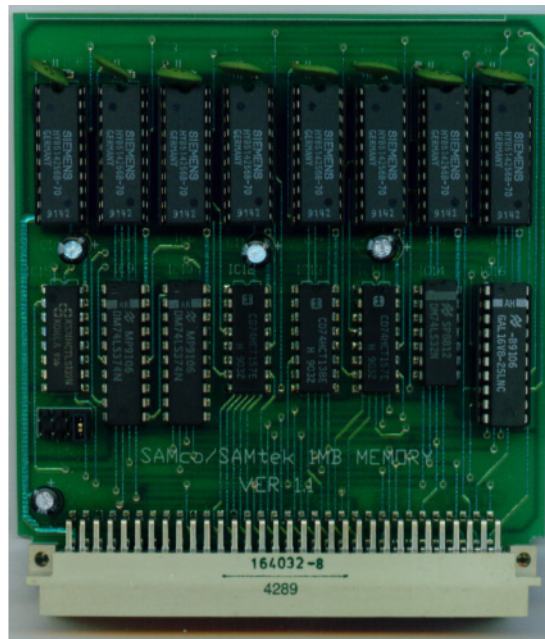processor addressable memory.

Each 1 Mb External Memory unit is divided into 64 pages of 16k
each, selected by the first 6 bits of ports 128 and 129. The most
significant two bits of each port select one of the four
possible 1 Mb External Memory units.

[The page above was all the instruction I got with my 1 Meg Pack !]

The circuit board details.
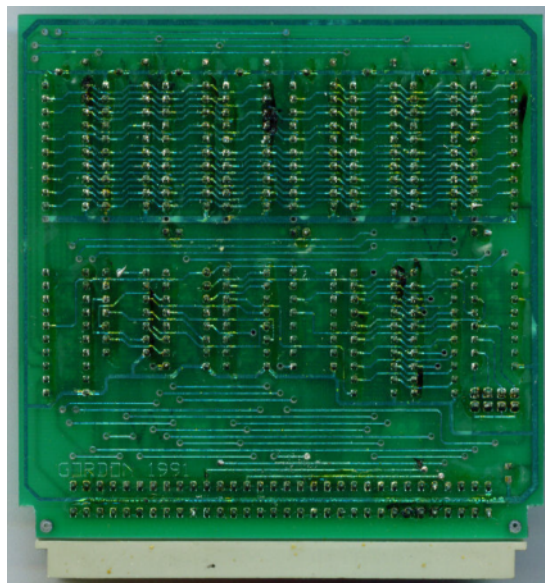
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For Sam Users everywhere

www.samcoupe.org