

Sheet 6

① (a) **Test** This is used to synchronise an external activity to the processor's internal operation after execution of the next instruction.

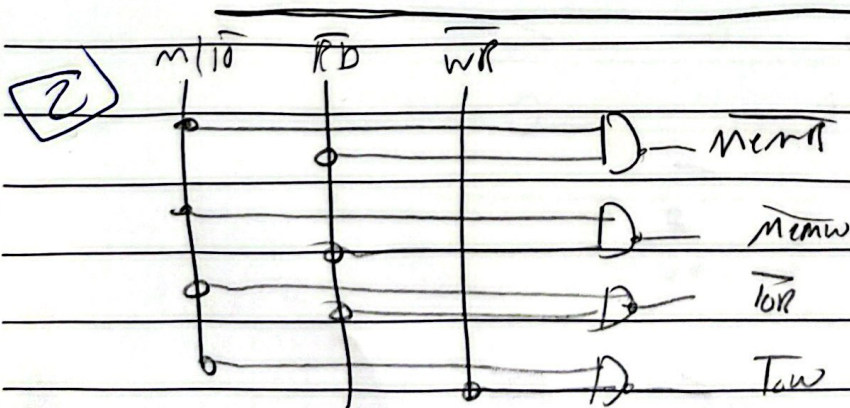
(b) **READY** This is the acknowledgment from the slave device or memory that

(c) **DT/R** output signal from the processor to control the direction of data flow through the data Transceivers

(d) **B14E** it is used to enable data onto the most significant half of data bus D8-D15

(e) **INTR** input signal used to inform the processor that a device requests an interrupt

② **HOLDA** output signal from the processor informing the DMA controller to use the bus for data transfer



Date: ____/____/____

	A_{23}	A_{22}	A_{21}	A_{20}	A_{19}	A_{18}	A_{17}	A_{16}	A_{15}	A_{14}	A_{13}	A_{12}	A_{11}	A_{10}
start	0	0	0	0	0	0	0	0	0	0	0	0	0	0
end	0	1	1	1	1	1	1	1	1	1	1	1	1	1
start	1	0	1	0	0	0	0	0	1	0	0	0	0	0
end	1	0	1	0	0	0	0	0	1	0	0	0	0	1
start	1	1	1	1	0	0	0	0	0	0	0	0	0	0
end	1	1	1	1	1	1	1	1	1	1	1	1	1	1

(4) in full address decoding, all high-order address bits are used to decode different ranges uniquely. This scheme leads to precise allocation of address ranges in the whole memory.

in partial decoding, a subset of the high-order address bits is used to decode different ranges.