

Proprietary information of Data General Corporation

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162B .EJECT;
163B .FT 1 "MEM          Source File          Cycle 1          18-AUG-82 15:24:34 RGG"
164B ;
165B
166B /*-----*
167B* |
168B* |      Memory references for the next macro instruction can be
169B* |      started by the IP from decode information.  In these two
170B* |      examples, the completion of an IP initiated memory
171B* |      reference is shown.  The completion is generic, i.e. read
172B* |      or write.  The start instigated by the IP specified the
173B* |      exact type of transfer to perform.
174B* |
175B* |      Also shown here is the attempt of the next EPA on behalf
176B* |      of the next executing macro instruction.  This attempt must
177B* |      be made in the last micro cycle of every macro instruction
178B* |      The combination of the attempt and popping an empty micro
179B* |      stack constitutes a macro instruction pop (IPOP).
180B* |
181B* /*-----*/
182B
183B
184B      %*****
185B      % Load and Store Instructions:  <<L X><W N> E ><LDA STA>
186B      %
187B      % Perform load or store of AC pointed to by DES.  IPOP.
188B      %*****
189B
--0010--LWLDA:
--0010--XWLDA:
--0010--LNLDA:
--0010--XNLDA:
--0010--ELDA:
--0010--LDA:   CPN = AG(DES) = ALU(DES) == MEM_READ, ATTEMPT_NEXT_EPA, RETURN;
              OP   TSEL ADDRESS D AA AB AG AOP AL ST CM CPM CPD RM R0  R1  R2  IA  IB  ID RS IOP IY  IL FR FS POP W FCW FL FRG X
              CRTN TRUE          DES D  EPA M  S@ R  MM          DES          M
--DFVs:
196B
--0011--LWSTA:
--0011--XWSTA:
--0011--LNSTA:
--0011--XNSTA:
--0011--ESTA:
--0011--STA:   CPN = MEM_WRITE == ALU(DES), ATTEMPT_NEXT_EPA, RETURN;
              OP   TSEL ADDRESS D AA AB AG AOP AL ST CM CPM CPD RM R0  R1  R2  IA  IB  ID RS IOP IY  IL FR FS POP W FCW FL FRG X
              CRTN TRUE          D  EPA  S@ W  IA          DES
--DFVs:
203B
204B
205B      %*****
206B      % Jump Instructions:  WBR, LJMP, XJMP, EJMP
207B      %
208B      % Complete IPST.  Go to IP_ALT WAIT.
209B      %*****
210B
--0012--WBR:
SAMPLES      Instruction Set Microcode      Rev 1          09-DEC-82 10:47:39 RGG
MEM          Source File                    Cycle 1          18-AUG-82 15:24:34 RGG
UASM      00.10.00          0008 - 01

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