```
                    IDENT SLCU2S                                                    ASM 04
                   *
                   ******************************************************************************
                   *TEST LOOP SYNCHRONOUS CONTR. UNIT
                   *RUNS WITH INTERRUPT.
                   *
                   **VARIABLE DEVICE ADDRSSES AND INT. LEVELS
                   ******************************************************************************
0000                        RES     /100
0200  20BF         START    INH
0202  87A0                  LDKL    A15,/150
0204  0150
0206  80A0                  LDKL    A8,/0809
0208  0809
020A  81A0                  LDKL    A9,/1819              INT LEVEL 1&2
020C  1819
                   *
                   *CLEAR I/O BUFFER.
                   *
020E  83A0                  LDKL    A11,/FFC0
0210  FFC0
0212  84A0                  LDKL    A12,CIOST1
0214  0000  F
0216  A3B3         CLEAR    ANRS    A11,A12
0218  94A0                  ADKL    A12,2
021A  0002
021C  ECA0                  CWK     A12,SST2+2
021E  0000  F
0220  5C0C                  RB(4)   CLEAR
0222  207F                  HLT
                   *
                   ******************************************************************************
                   *LOAD IN A8 THE DEVICE ADDRESSES
                   *BIT 2-07 DEVICE ONE, TRANSMITTER
                   *BIT 10-15 DEVICE TWO, RECEIVER
                   *
                   *LOAD IN A9 THE INTERRUPT LEVEL.
                   *BIT 02-07 DEVICE ONE.
                   *BIT 10-15 DEVICE TWO.
                   *
                   *LOAD IN BUF1 CHARACTERS TO BE TRANSMIT (MAX 2X/20)
                   *
                   *IN BUF2 YOU WILL FIND THE INCOMING CHARACTERS.
                   *
                   *FOR TESTING CONNECT THE CONTROL UNIT TO THE TESTBOX
                   *FULL DUPLEX OR HALF DUPLEX.
                   *TESTING WITHOUT TESTBOX, CONNECT THE CU TO A MODEM
                   *AND LOOP IT ON THE TELEPHONE SIDE (WIRE A,B,C,D)
                   *USE THAN FULL DUPLEX (IN THIS CASE ONLY ONE MODEM IS NECESARY
                   *
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00043                       *FOR TESTING WITHOUT TESTBOX OR MODEM CONNECT THE THE TWO
00044                       *CONNECTERS OF THE CONTROL UNIT IN A PROPER WAY.
00045                       *
00046                       ********************************************
00047  0224  8382                   LDR     A11,A8
00048  0226  8120                   LDKL    A1,CIOST2
       0228  0000  F
00049  022A  A3A0                   ANKL    A11,/3F
       022C  003F
00050  022E  93A5           CALC    ADRS    A11,A1          CALCULATE DEVICE ADDRESS.2
00051  0230  9120                   ADKL    A1,2
       0232  0002
00052  0234  E920                   CWK     A1,SST2+2
       0236  0000  F
00053  0238  5C0C                   RB(4)   CALC
00054  023A  8120                   LDKL    A1,CIOST1       CCCALCULATE DEVICE ADDRESS 1.
       023C  0000  F
00055  023E  E382                   ECR     A11,A8
00056  0240  A3A0                   ANKL    A11,/3F
       0242  003F
00057  0244  93A5                   ADRS    A11,A1
00058  0246  1102                   ADK     A1,2
00059  0248  E920                   CWK     A1,SST1+2
       024A  0000  F
00060  024C  5C0A                   RB(4)   *-8
00061                       *CALCULATION OF INTERRUPT LEVELS.
00062  024E  8106                   LDR     A1,A9           CALCULATE INTERRUPT LEVEL
00063  0250  213F                   ANK     A1,/3F
00064  0252  3941                   SLL     A1,1
00065  0254  84A0                   LDKL    A12,INTB
       0256  0000  F
00066  0258  84A5                   STR     A12,A1
00067  025A  E106                   ECR     A1,A9           CALCULATE INT. LEVEL 1.
00068  025C  213F                   ANK     A1,/3F
00069  025E  3941                   SLL     A1,1
00070  0260  84A0                   LDKL    A12,INTA
       0262  0000  F 310
00071  0264  84A5                   STR     A12,A1
00072                       *
00073                       *MAIN PROGRAM STARTS HERE.
00074                       *
00075  0266  84A0           START2  LDKL    A12,BUF1
       0268  0000  F 344
00076  026A  85A0                   LDKL    A13,BUF2
       026C  0000  F 3EA
00077  026E  01B0                   LDK     A1,/B0          OUTPUT (SYN ,NOPAR.,CCITT.)
00078  0270  87A0                   LDKL    A15,/150
       0272  0150
00079  0274  2840                   ENB
00080  0276  0600                   LDK     A6,0
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```
00081  0278  0532                LDK     A5,/32      SYNCH. EBCDIC CODE
00082  027A  C2B1                LDK     A2,/B1      INPUT
00083  027C  F041                EX      CIOST1
       027E  0000  F02F4
00084  0280  F041                EX      OTRS1
       0282  0000  F02FC
00085  0284  5C06                RB(4)   *-4
00086  0286  F041                EX      CIOST2
       0288  0000  F0302
00087  028A  F041                EX      OTRS2
       028C  0000  F0308
00088  028E  5C06                RB(4)   *-4
00089  0290  0101                LDK     A1,1
00090  0292  F041    WAIT        EX      TST1        WAIT TIL CU 1 IS INACTIVE
       0294  0000  F02FE
00091  0296  1700                ADK     A7,0
00092  0298  5C08                RB(4)   WAIT
00093  029A  F041    WAIT2       EX      TST2        WAIT TIL CU2 IS INACTIVE
       029C  0000  F030C
00094  029E  1700                ADK     A7,0
00095  02A0  583C                RB(0)   START2      CU IS INAC. START AGAIN
00096  02A2  1601                ADK     A6,1
00097  02A4  EE20                CHK     A6,/0800    TIME DELAY FOR RECEIVING CU
       02A6  0800
00098  02A8  5C10                RB(4)   WAIT2
00099  02AA  F041                EX      CIOHL2      STOP INPUT START AGAIN
       02AC  0000  F0304
00100  02AE  5F4A                RB(7)   START2
00101  02B0  207F                HLT
00102  02B2                      RES     /20
00103  02F2  207F                HLT
00104                    *
00105                    *
00106                    *I/O COMMANDS
00107                    *
00108  02F4  41C0        CIOST1  CIO     A1,1,0
00109  02F6  4180        CIOHL1  CIO     A1,0,0
00110  02F8  4C00        INR1    INR     A4,0,0
00111  02FA  4500        OTR1    OTR     A5,0,0
00112  02FC  4540        OTRS1   OTR     A5,1,0
00113  02FE  4F80        TST1    TST     A7,0
00114  0300  4BC0        SST1    SST     A3,0
00115  0302  42C0        CIOST2  CIO     A2,1,0
00116  0304  4180        CIOHL2  CIO     A1,0,0
00117  0306  4C00        INR2    INR     A4,0,0
00118  0308  4540        OTRS2   OTR     A5,1,0
00119  030A  4500        OTR2    OTR     A5,0,0
00120  030C  4F80        TST2    TST     A7,0
00121  030E  4BC0        SST2    SST     A3,0
00122                    *
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00123                        *
00124                        *INTERRUPT ROUTINE
00125                        *
00126  0310  E532      INTA  LCR     A5,A12
00127  0312  F041            EX      OTR1
       0314  02FA  R
00128  0316  5400  F 540E    RF(4)   SSTS1
00129  0318  94A0            ADKL    A12,1
       031A  0001
00130  031C  ECA0            CWK     A12,BUF1EN
       031E  0000  F 03E6
00131  0320  5400  F 5414    RF(4)   RETURN
00132  0322  F041            EX      CIOHL1
       0324  02F6  R
00133  0326  F041      SSTS1 EX      SST1
       0328  0300  R
00134  032A  8341            ST      A3,SSTB1        SAVE STATUS WORD
       032C  0000  F 03A0
00135  032E  EB20            CWK     A3,0
       0330  0000
00136  0332  5002            RF(0)   *+4             STATUS ZERO?
00137  0334  207F            HLT                     CHANGE IT IN /5700 WITH STATUS ERROR
00138  0336  F03E      RETURN RTN    A15
00139  0338                  RES     /10
00140                        *
00141                        *
00142                        *
00143  0358  F041      INTB  EX      INR2
       035A  0306  R
00144  035C  5400  F 5410    RF(4)   SSTS2
00145  035E  E437            SCR     A4,A13
00146  0360  95A0            ADKL    A13,1
       0362  0001
00147  0364  EDA0            CWK     A13,BUF2EN
       0366  0000  F 0438
00148  0368  5400  F 5414    RF(4)   RET
00149  036A  F041            EX      CIOHL2
       036C  0304  R
00150  036E  F041      SSTS2 EX      SST2
       0370  030E  R
00151  0372  8341            ST      A3,SSTB2        SAVE STATUS WORD
       0374  0000  F 03A2
00152  0376  EB20            CWK     A3,0
       0378  0000
00153  037A  5002            RF(0)   *+4             STATUS ZERO?
00154  037C  207F            HLT                     CHANGE IT IN /5700
00155  037E  F03E      RET   RTN     A15
00156  0380                  RES     /10
00157                        *
00158                        *RESEVE FOR BUFFERS
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00159                       *
00160  03A0                 SSTB1   RES     1
00161  03A2                 SSTB2   RES     1
00162  03A4  3232           BUF1    DATA    /3232                   SYNC. CHARACTER (2), EBCDIC CODE
00163  03A6  02FF                   DATA    /02FF                   STX, /FF
00164  03A8  4920                   DATA    'I TRY TO TRANSMIT SOMETHING'
       03AA  5452
       03AC  5920
       03AE  544F
       03B0  2054
       03B2  5241
       03B4  4E53
       03B6  4D49
       03B8  5420
       03BA  534F
       03BC  4D45
       03BE  5448
       03C0  494E
       03C2  4720
00165  03C4  FF03                   DATA    /FF03                   /FF AND ETX
00166  03C6                        RES     /10
00167  03E6                 BUF1EN  RES     2
00168  03EA  0000           BUF2    DATA    /0000,/0000,/0000
       03EC  0000
       03EE  0000
00169  03F0                        RES     /24
00170  0438                 BUF2EN  RES     2
00171                              END     START
```

SYMBOL TABLE

START	0200	R	CIOST1	02F4	R	CLEAR	0216	R	SST2	030E	R
CIOST2	0302	R	CALC	022E	R	SST1	0300	R	INTB	0358	R
INTA	0310	R	START2	0266	R	BUF1	03A4	R	BUF2	03EA	R
OTRS1	02FC	R	OTRS2	0308	R	WAIT	0292	R	TST1	02FE	R
WAIT2	029A	R	TST2	030C	R	CIOHL2	0304	R	CIOHL1	02F6	R
INR1	02F8	R	OTR1	02FA	R	INR2	0306	R	OTR2	030A	R
SSTS1	0326	R	BUF1EN	03E6	R	RETURN	0336	R	SSTB1	03A0	R
SSTS2	036E	R	BUF2EN	043B	R	RET	037E	R	SSTB2	03A2	R

ASS.ERR. 00000

:EOF

PROG ELAPSED TIME: 00H-01M-13S-900MS-