```
;;;
```

```
          + /INIT */HRIN0 * HRIN1 * HRIN2 * HRIN3 */EE.PIN */PARITY0
          */LEDATAX
  PARITY0.D2 = /INIT */HRIN0 */HRIN1 */HRIN2 */HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT * HRIN0 * HRIN1 */HRIN2 */HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT * HRIN0 */HRIN1 * HRIN2 */HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT */HRIN0 * HRIN1 * HRIN2 */HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT * HRIN0 */HRIN1 */HRIN2 * HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT */HRIN0 * HRIN1 */HRIN2 * HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT */HRIN0 */HRIN1 * HRIN2 * HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT * HRIN0 * HRIN1 * HRIN2 * HRIN3 */EE.PIN * PARITY0
          */LEDATAX
          + /INIT * PARITY0 * LEDATAX
  PARITY0.CLKF =  CLK

PARITY1 :=  PARITY1.D1 Or PARITY1.D2  ; High density function block

  PARITY1.D1 = /INIT * HRIN4 */HRIN5 */EE.PIN */HRIN6.PIN */HRIN7.PIN
          */LEDATAX */PARITY1
          + /INIT */HRIN4 * HRIN5 */EE.PIN */HRIN6.PIN */HRIN7.PIN
          */LEDATAX */PARITY1
          + /INIT */HRIN4 */HRIN5 */EE.PIN * HRIN6.PIN */HRIN7.PIN
          */LEDATAX */PARITY1
          + /INIT * HRIN4 * HRIN5 */EE.PIN * HRIN6.PIN */HRIN7.PIN
          */LEDATAX */PARITY1
          + /INIT */HRIN4 */HRIN5 */EE.PIN */HRIN6.PIN * HRIN7.PIN
          */LEDATAX */PARITY1
          + /INIT * HRIN4 * HRIN5 */EE.PIN */HRIN6.PIN * HRIN7.PIN
          */LEDATAX */PARITY1
          + /INIT * HRIN4 */HRIN5 */EE.PIN * HRIN6.PIN * HRIN7.PIN
          */LEDATAX */PARITY1
          + /INIT */HRIN4 * HRIN5 */EE.PIN * HRIN6.PIN * HRIN7.PIN
          */LEDATAX */PARITY1
  PARITY1.D2 = /INIT */HRIN4 */HRIN5 */EE.PIN */HRIN6.PIN */HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT * HRIN4 * HRIN5 */EE.PIN */HRIN6.PIN */HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT * HRIN4 */HRIN5 */EE.PIN * HRIN6.PIN */HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT */HRIN4 * HRIN5 */EE.PIN * HRIN6.PIN */HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT * HRIN4 */HRIN5 */EE.PIN * HRIN6.PIN * HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT */HRIN4 * HRIN5 */EE.PIN */HRIN6.PIN * HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT * HRIN4 */HRIN5 */EE.PIN * HRIN6.PIN * HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT */HRIN4 * HRIN5 */EE.PIN * HRIN6.PIN * HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT * HRIN4 */HRIN5 */EE.PIN * HRIN6.PIN * HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT * HRIN4 * HRIN5 */EE.PIN * HRIN6.PIN * HRIN7.PIN
          */LEDATAX * PARITY1
          + /INIT * LEDATAX * PARITY1
  PARITY1.CLKF =  CLK

PARITY2 :=  PARITY2.D1 Or PARITY2.D2  ; High density function block

  PARITY2.D1 = /INIT */HRIN10 */HRIN11 */EE.PIN * HRIN8.PIN */HRIN9.PIN
          */LEDATAX */PARITY2
```



```
          + /INIT */HRIN10 */HRIN11 */EE.PIN */HRIN8.PIN * HRIN9.PIN
          */LEDATAX */PARITY2
          + /INIT * HRIN10 */HRIN11 */EE.PIN */HRIN8.PIN */HRIN9.PIN
          */LEDATAX */PARITY2
          + /INIT * HRIN10 */HRIN11 */EE.PIN * HRIN8.PIN * HRIN9.PIN
          */LEDATAX */PARITY2
          + /INIT */HRIN10 * HRIN11 */EE.PIN */HRIN8.PIN */HRIN9.PIN
          */LEDATAX */PARITY2
          + /INIT */HRIN10 * HRIN11 */EE.PIN * HRIN8.PIN * HRIN9.PIN
          */LEDATAX */PARITY2
          + /INIT * HRIN10 * HRIN11 */EE.PIN */HRIN8.PIN */HRIN9.PIN
          */LEDATAX */PARITY2
          + /INIT * HRIN10 * HRIN11 */EE.PIN */HRIN8.PIN * HRIN9.PIN
          */LEDATAX */PARITY2
  PARITY2.D2 = /INIT */HRIN10 */HRIN11 */EE.PIN */HRIN8.PIN */HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT */HRIN10 */HRIN11 */EE.PIN * HRIN8.PIN * HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT * HRIN10 */HRIN11 */EE.PIN * HRIN8.PIN */HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT * HRIN10 */HRIN11 */EE.PIN */HRIN8.PIN * HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT */HRIN10 * HRIN11 */EE.PIN * HRIN8.PIN */HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT */HRIN10 * HRIN11 */EE.PIN */HRIN8.PIN * HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT * HRIN10 * HRIN11 */EE.PIN */HRIN8.PIN */HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT * HRIN10 * HRIN11 */EE.PIN * HRIN8.PIN * HRIN9.PIN
          */LEDATAX * PARITY2
          + /INIT * LEDATAX * PARITY2
  PARITY2.CLKF =  CLK

PARITY3 :=  PARITY3.D1 Or PARITY3.D2  ; High density function block

  PARITY3.D1 = /INIT * HRIN12 */HRIN13 */HRIN14 */HRIN15 */EE.PIN */LEDATAX
          */PARITY3
          + /INIT */HRIN12 * HRIN13 */HRIN14 */HRIN15 */EE.PIN */LEDATAX
          */PARITY3
          + /INIT */HRIN12 */HRIN13 * HRIN14 */HRIN15 */EE.PIN */LEDATAX
          */PARITY3
          + /INIT */HRIN12 * HRIN13 * HRIN14 */HRIN15 */EE.PIN */LEDATAX
          */PARITY3
          + /INIT */HRIN12 */HRIN13 */HRIN14 * HRIN15 */EE.PIN */LEDATAX
          */PARITY3
          + /INIT */HRIN12 * HRIN13 */HRIN14 * HRIN15 */EE.PIN */LEDATAX
          */PARITY3
          + /INIT * HRIN12 */HRIN13 * HRIN14 * HRIN15 */EE.PIN */LEDATAX
          */PARITY3
          + /INIT */HRIN12 * HRIN13 * HRIN14 * HRIN15 */EE.PIN */LEDATAX
          */PARITY3
  PARITY3.D2 = /INIT */HRIN12 */HRIN13 */HRIN14 */HRIN15 */EE.PIN */LEDATAX
          * PARITY3
          + /INIT * HRIN12 * HRIN13 */HRIN14 */HRIN15 */EE.PIN */LEDATAX
          * PARITY3
          + /INIT */HRIN12 * HRIN13 * HRIN14 */HRIN15 */EE.PIN */LEDATAX
          * PARITY3
          + /INIT */HRIN12 * HRIN13 */HRIN14 * HRIN15 */EE.PIN */LEDATAX
          * PARITY3
          + /INIT * HRIN12 */HRIN13 */HRIN14 * HRIN15 */EE.PIN */LEDATAX
          * PARITY3
          + /INIT */HRIN12 * HRIN13 */HRIN14 * HRIN15 */EE.PIN */LEDATAX
```

```
          * PARITY3
          + /INIT */HRIN12 */HRIN13 * HRIN14 * HRIN15 */EE.PIN */LEDATAX
          * PARITY3
          + /INIT * HRIN12 * HRIN13 * HRIN14 * HRIN15 */EE.PIN */LEDATAX
          * PARITY3
          + /INIT * LEDATAX * PARITY3
  PARITY3.CLKF =  CLK

PARITY4 :=  PARITY4.D1 Or PARITY4.D2  ; High density function block

  PARITY4.D1 = /INIT * HRIN16 */HRIN17 */HRIN18 */HRIN19 */EE.PIN */LEDATAX
          */PARITY4
          + /INIT */HRIN16 * HRIN17 */HRIN18 */HRIN19 */EE.PIN */LEDATAX
          */PARITY4
          + /INIT */HRIN16 */HRIN17 * HRIN18 */HRIN19 */EE.PIN */LEDATAX
          */PARITY4
          + /INIT * HRIN16 * HRIN17 * HRIN18 */HRIN19 */EE.PIN */LEDATAX
          */PARITY4
          + /INIT */HRIN16 */HRIN17 */HRIN18 * HRIN19 */EE.PIN */LEDATAX
          */PARITY4
          + /INIT * HRIN16 * HRIN17 */HRIN18 * HRIN19 */EE.PIN */LEDATAX
          */PARITY4
          + /INIT * HRIN16 */HRIN17 * HRIN18 * HRIN19 */EE.PIN */LEDATAX
          */PARITY4
          + /INIT */HRIN16 * HRIN17 * HRIN18 * HRIN19 */EE.PIN */LEDATAX
          */PARITY4
  PARITY4.D2 = /INIT */HRIN16 */HRIN17 */HRIN18 */HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT * HRIN16 * HRIN17 */HRIN18 */HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT * HRIN16 */HRIN17 * HRIN18 */HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT */HRIN16 * HRIN17 * HRIN18 */HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT * HRIN16 */HRIN17 * HRIN18 * HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT */HRIN16 * HRIN17 */HRIN18 * HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT */HRIN16 */HRIN17 * HRIN18 * HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT */HRIN16 */HRIN17 */HRIN18 * HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT * HRIN16 * HRIN17 * HRIN18 * HRIN19 */EE.PIN */LEDATAX
          * PARITY4
          + /INIT * LEDATAX * PARITY4
  PARITY4.CLKF =  CLK

/PARITY5.T  = /NRLE */HLE
       + /EE */EP */HRIN20
       + /EE * EP * HRIN20
       +  EE */PARITY5    ; Fast function block
  PARITY5.CLKF =  CLK
  PARITY5.RSTF =  INIT

GLPAR  =  GLPAR.D1 Xor GLPAR.D2  ; High density function block

  GLPAR.D1 =  PARITY0 */PARITY1 */PARITY2
          + /PARITY0 * PARITY1 */PARITY2
          + /PARITY0 */PARITY1 * PARITY2
          +  PARITY0 * PARITY1 * PARITY2
  GLPAR.D2 =  PARITY3 */PARITY4 */PARITY5
          + /PARITY3 * PARITY4 */PARITY5
          + /PARITY3 */PARITY4 * PARITY5
          +  PARITY3 * PARITY4 * PARITY5
```



```
ERROR4.T  =  EE * NRLE * HRIN4 */HEVTAG0 */ERROR4
      +  EE * NRLE */HRIN4 * HEVTAG0 */ERROR4
      +  EE * NRLE * HRIN5 */ERROR4 */HEVTAG1
      +  EE * NRLE */HRIN5 */ERROR4 * HEVTAG1    ; Fast function block
  ERROR4.CLKF =  CLK
  ERROR4.RSTF =  VMERESET

  ERROR4_1.EXPORT =  EE * NRLE * HRIN6 */ERROR4 */HEVTAG2
          +  EE * NRLE */HRIN6 */ERROR4 * HEVTAG2
          +  EE * NRLE * HRIN7 */ERROR4 */HEVTAG3
          +  EE * NRLE */HRIN7 */ERROR4 * HEVTAG3    ; Fast function block

  ERROR4_2.EXPORT =  EE * NRLE * HRIN8 */ERROR4 */HEVTAG4
          +  EE * NRLE */HRIN8 */ERROR4 * HEVTAG4
          +  EE * NRLE * HRIN9 */ERROR4 */HEVTAG5
          +  EE * NRLE */HRIN9 */ERROR4 * HEVTAG5    ; Fast function block

  ERROR4_3.EXPORT =  EE * NRLE * HRIN10 */ERROR4 */HEVTAG6
          +  EE * NRLE */HRIN10 */ERROR4 * HEVTAG6
          +  EE * NRLE * HRIN11 */ERROR4 */HEVTAG7
          +  EE * NRLE */HRIN11 */ERROR4 * HEVTAG7    ; Fast function block

/GDATA20  =  CLRTAG */UNDERR20
      + /CLRTAG */DATA20.PIN    ; High density function block

/GDATA19  =  CLRTAG */UNDERR19
      + /CLRTAG */DATA19.PIN    ; High density function block

/GDATA18  =  CLRTAG */UNDERR18
      + /CLRTAG */DATA18.PIN    ; High density function block

/GDATA17  =  CLRTAG */UNDERR17
      + /CLRTAG */DATA17.PIN    ; High density function block

/GDATA16  =  CLRTAG */UNDERR16
      + /CLRTAG */DATA16.PIN    ; High density function block

/GDATA15  =  CLRTAG */UNDERR15
      + /CLRTAG */DATA15.PIN    ; High density function block

/GDATA14  =  CLRTAG */UNDERR14
      + /CLRTAG */DATA14.PIN    ; High density function block

/GDATA13  =  CLRTAG */EVHOVRFL
      + /CLRTAG */DATA13.PIN    ; High density function block

/GDATA12  =  CLRTAG */INVDATA
      + /CLRTAG */DATA12.PIN    ; High density function block

/GDATA11  =  CLRTAG */FIFOOVRFL
      + /CLRTAG */DATA11.PIN    ; High density function block

/GDATA10  =  CLRTAG */LOSTSYNC
      + /CLRTAG */DATA10.PIN    ; High density function block

/GDATA9  =  CLRTAG */PAER
      + /CLRTAG */DATA9.PIN    ; High density function block

/GDATA8  = /CLRTAG */DATA8.PIN
      +  CLRTAG */DATA8    ; High density function block
```

```
/GDATA7  =  CLRTAG */HEVTAG7
       + /CLRTAG */DATA7.PIN    ; High density function block

/GDATA6  =  CLRTAG */HEVTAG6
       + /CLRTAG */DATA6.PIN    ; High density function block

/GDATA5  =  CLRTAG */HEVTAG5
       + /CLRTAG */DATA5.PIN    ; High density function block

/GDATA4  =  CLRTAG */HEVTAG4
       + /CLRTAG */DATA4.PIN    ; High density function block

/GDATA3  =  CLRTAG */HEVTAG3
       + /CLRTAG */DATA3.PIN    ; High density function block

/GDATA2  =  CLRTAG */HEVTAG2
       + /CLRTAG */DATA2.PIN    ; High density function block

/GDATA1  =  CLRTAG */HEVTAG1
       + /CLRTAG */DATA1.PIN    ; High density function block

/GDATA0  =  CLRTAG */HEVTAG0
       + /CLRTAG */DATA0.PIN    ; High density function block

/ERROR2 := /HRIN8.PIN */GLPAR */ERROR2
       +  HRIN8.PIN * GLPAR */ERROR2
       + /HLE.PIN */ERROR2
       + /EE.PIN */ERROR2    ; High density function block
   ERROR2.CLKF =  CLK
   ERROR2.RSTF =  VMERESET

/ERROR3 := /HRIN12 */GLPAR */ERROR3
       +  HRIN12 * GLPAR */ERROR3
       + /NRLE.PIN */ERROR3
       + /EE.PIN */ERROR3    ; High density function block
   ERROR3.CLKF =  CLK
   ERROR3.RSTF =  VMERESET

 PAER :=  HRIN12 * EE.PIN * NRLE.PIN */GLPAR
       +  EE.PIN * HRIN8.PIN * HLE.PIN */GLPAR
       + /HRIN12 * EE.PIN * NRLE.PIN * GLPAR
       +  EE.PIN */HRIN8.PIN * HLE.PIN * GLPAR
       +  HRIN13 * EE.PIN * NRLE.PIN
       +  EE.PIN * HRIN9.PIN * HLE.PIN
       +  PAER    ; High density function block
   PAER.CLKF =  CLK
   PAER.RSTF =  EERESET

/DATA20 := /DATA20 */HLE.PIN */NRLE.PIN
       + /HRIN20 * HLE.PIN */NRLE.PIN
       + /HRIN3 */HRIN20 * NRLE.PIN
       + /HRIN3 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA20.CLKF =  CLK

/DATA19 := /DATA19 */HLE.PIN */NRLE.PIN
       + /HRIN19 * HLE.PIN */NRLE.PIN
       + /HRIN2 */HRIN19 * NRLE.PIN
       + /HRIN2 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA19.CLKF =  CLK

/DATA18 := /DATA18 */HLE.PIN */NRLE.PIN
       + /HRIN18 * HLE.PIN */NRLE.PIN
```



```
       + /HRIN1 */HRIN18 * NRLE.PIN
       + /HRIN1 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA18.CLKF =  CLK

/DATA17 := /DATA17 */HLE.PIN */NRLE.PIN
       + /HRIN17 * HLE.PIN */NRLE.PIN
       + /HRIN0 */HRIN17 * NRLE.PIN
       + /HRIN0 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA17.CLKF =  CLK

/DATA16 := /DATA16 */HLE.PIN */NRLE.PIN
       + /HRIN16 * HLE.PIN */NRLE.PIN
       + /HRIN16 */HRIN20 * NRLE.PIN
       + /HRIN20 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA16.CLKF =  CLK

/DATA15 := /DATA15 */HLE.PIN */NRLE.PIN
       + /HRIN15 * HLE.PIN */NRLE.PIN
       + /HRIN15 */HRIN19 * NRLE.PIN
       + /HRIN19 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA15.CLKF =  CLK

/DATA14 := /DATA14 */HLE.PIN */NRLE.PIN
       + /HRIN14 * HLE.PIN */NRLE.PIN
       + /HRIN14 */HRIN18 * NRLE.PIN
       + /HRIN18 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA14.CLKF =  CLK

/DATA13 := /DATA13 */HLE.PIN */NRLE.PIN
       + /HRIN13 * HLE.PIN */NRLE.PIN
       + /HRIN13 */HRIN17 * NRLE.PIN
       + /HRIN17 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA13.CLKF =  CLK

/DATA12 := /DATA12 */HLE.PIN */NRLE.PIN
       + /HRIN12 * HLE.PIN */NRLE.PIN
       + /HRIN12 */HRIN16 * NRLE.PIN
       + /HRIN16 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA12.CLKF =  CLK

/DATA11 := /DATA11 */HLE.PIN */NRLE.PIN
       + /HRIN11 * HLE.PIN */NRLE.PIN
       + /HRIN11 */HRIN15 * NRLE.PIN
       + /HRIN15 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA11.CLKF =  CLK

/DATA10 := /DATA10 */HLE.PIN */NRLE.PIN
       + /HRIN10 * HLE.PIN */NRLE.PIN
       + /HRIN10 */HRIN14 * NRLE.PIN
       + /HRIN14 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA10.CLKF =  CLK

/DATA9 := /DATA9 */HLE.PIN */NRLE.PIN
       + /HRIN9.PIN * HLE.PIN */NRLE.PIN
       + /HRIN13 */HRIN9.PIN * NRLE.PIN
       + /HRIN13 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA9.CLKF =  CLK

/DATA8 := /DATA8 */HLE.PIN */NRLE.PIN
       + /HRIN8.PIN * HLE.PIN */NRLE.PIN
       + /HRIN12 */HRIN8.PIN * NRLE.PIN
       + /HRIN12 */HLE.PIN * NRLE.PIN    ; High density function block
```

```
   DATA8.CLKF =  CLK

/DATA7 := /DATA7 */HLE.PIN */NRLE.PIN
       + /HRIN7.PIN * HLE.PIN */NRLE.PIN
       + /HRIN11 */HRIN7.PIN * NRLE.PIN
       + /HRIN11 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA7.CLKF =  CLK

/DATA6 := /DATA6 */HLE.PIN */NRLE.PIN
       + /HRIN6.PIN * HLE.PIN */NRLE.PIN
       + /HRIN10 */HRIN6.PIN * NRLE.PIN
       + /HRIN10 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA6.CLKF =  CLK

/DATA5 := /DATA5 */HLE.PIN */NRLE.PIN
       + /HRIN5 * HLE.PIN */NRLE.PIN
       + /HRIN5 */HRIN9.PIN * NRLE.PIN
       + /HRIN9.PIN */HLE.PIN * NRLE.PIN    ; High density function block
   DATA5.CLKF =  CLK

/DATA4 := /DATA4 */HLE.PIN */NRLE.PIN
       + /HRIN4 * HLE.PIN */NRLE.PIN
       + /HRIN4 */HRIN8.PIN * NRLE.PIN
       + /HRIN8.PIN */HLE.PIN * NRLE.PIN    ; High density function block
   DATA4.CLKF =  CLK

/DATA3 := /DATA3 */HLE.PIN */NRLE.PIN
       + /HRIN3 * HLE.PIN */NRLE.PIN
       + /HRIN3 */HRIN7.PIN * NRLE.PIN
       + /HRIN7.PIN */HLE.PIN * NRLE.PIN    ; High density function block
   DATA3.CLKF =  CLK

/DATA2 := /DATA2 */HLE.PIN */NRLE.PIN
       + /HRIN2 * HLE.PIN */NRLE.PIN
       + /HRIN2 */HRIN6.PIN * NRLE.PIN
       + /HRIN6.PIN */HLE.PIN * NRLE.PIN    ; High density function block
   DATA2.CLKF =  CLK

/DATA1 := /DATA1 */HLE.PIN */NRLE.PIN
       + /HRIN1 * HLE.PIN */NRLE.PIN
       + /HRIN1 */HRIN5 * NRLE.PIN
       + /HRIN5 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA1.CLKF =  CLK

/DATA0 := /DATA0 */HLE.PIN */NRLE.PIN
       + /HRIN0 * HLE.PIN */NRLE.PIN
       + /HRIN0 */HRIN4 * NRLE.PIN
       + /HRIN4 */HLE.PIN * NRLE.PIN    ; High density function block
   DATA0.CLKF =  CLK

/ERRORLINE  =  UIM_3
       +  UIM_4
       +  UIM_8
       +  UIM_9
       +  UIM_10
       +  UIM_6
       +  UIM_5
       +  UIM_7    ; High density function block

/IVDATA7  = /IVADD4 */ERROR7
       +  IVADD4 * ERREN7.PIN    ; Fast function block
```



```
/IVDATA6  = /IVADD4 */ERROR6
       +  IVADD4 * ERREN6.PIN    ; Fast function block

/IVDATA5  = /IVADD4 */ERROR5
       +  IVADD4 * ERREN5.PIN    ; Fast function block

/IVDATA4  = /IVADD4 */ERROR4
       +  IVADD4 * ERREN4.PIN    ; Fast function block

/IVDATA3  = /IVADD4 */ERROR3
       +  IVADD4 * ERREN3.PIN    ; Fast function block

/IVDATA2  = /IVADD4 */ERROR2
       +  IVADD4 * ERREN2.PIN    ; Fast function block

/IVDATA1  = /IVADD4 */ERROR1
       +  IVADD4 * ERREN1.PIN    ; Fast function block

/IVDATA0  = /IVADD4 */ERROR0
       +  IVADD4 * ERREN0.PIN    ; Fast function block

/ERREN7  =  IVDATA7.PIN    ; High density function block

/ERREN6  =  IVDATA6.PIN    ; High density function block

/ERREN5  =  IVDATA5.PIN    ; High density function block

/ERREN4  =  IVDATA4.PIN    ; High density function block

/ERREN3  =  IVDATA3.PIN    ; High density function block

/ERREN2  =  IVDATA2.PIN    ; High density function block

/ERREN1  =  IVDATA1.PIN    ; High density function block

/ERREN0  =  IVDATA0.PIN    ; High density function block

 UNDERR20 :=  HRIN20 * EE.PIN * HLE.PIN
       +  HRIN3 * EE.PIN * NRLE.PIN
       +  UNDERR20    ; Fast function block
   UNDERR20.CLKF =  CLK
   UNDERR20.RSTF =  EERESET

 UNDERR19 :=  HRIN19 * EE.PIN * HLE.PIN
       +  HRIN2 * EE.PIN * NRLE.PIN
       +  UNDERR19    ; Fast function block
   UNDERR19.CLKF =  CLK
   UNDERR19.RSTF =  EERESET

 UNDERR18 :=  HRIN18 * EE.PIN * HLE.PIN
       +  HRIN1 * EE.PIN * NRLE.PIN
       +  UNDERR18    ; Fast function block
   UNDERR18.CLKF =  CLK
   UNDERR18.RSTF =  EERESET

 UNDERR17 :=  HRIN17 * EE.PIN * HLE.PIN
       +  HRIN0 * EE.PIN * NRLE.PIN
       +  UNDERR17    ; Fast function block
   UNDERR17.CLKF =  CLK
   UNDERR17.RSTF =  EERESET

 UNDERR16 :=  HRIN20 * EE.PIN * NRLE.PIN
```

```
       +  HRIN16 * EE.PIN * HLE.PIN
       +  UNDERR16    ; Fast function block
   UNDERR16.CLKF =  CLK
   UNDERR16.RSTF =  EERESET

 UNDERR15 :=  HRIN19 * EE.PIN * NRLE.PIN
       +  HRIN15 * EE.PIN * HLE.PIN
       +  UNDERR15    ; Fast function block
   UNDERR15.CLKF =  CLK
   UNDERR15.RSTF =  EERESET

 UNDERR14 :=  HRIN14 * EE.PIN * HLE.PIN
       +  UNDERR14
       +  HRIN18 * EE.PIN * NRLE.PIN    ; Fast function block
   UNDERR14.CLKF =  CLK
   UNDERR14.RSTF =  EERESET

 FIFOOVRFL :=  HRIN15 * EE.PIN * NRLE.PIN
       +  HRIN11 * EE.PIN * HLE.PIN
       + /UIM_1    ; High density function block
   FIFOOVRFL.CLKF =  CLK
   FIFOOVRFL.RSTF =  INIT

/ERROR0 :=  HFIFOFULLX */ERROR0
       +  INIT */ERROR0    ; High density function block
   ERROR0.CLKF =  CLK
   ERROR0.RSTF =  VMERESET

/ERROR1 :=  RFIFOFULLX */ERROR1
       +  INIT */ERROR1    ; High density function block
   ERROR1.CLKF =  CLK
   ERROR1.RSTF =  VMERESET

/INVADDQ := /INVADD0 */INVADDQ
       + /INVADD1 */INVADDQ
       + /INVADD2 */INVADDQ
       + /INVADD3 */INVADDQ    ; Fast function block
   INVADDQ.CLKF =  NCLK
   INVADDQ.RSTF =  EERESET

 INVDATA :=  LEP * EE.PIN * HLE.PIN * INVADDQ
       +  HRIN12 * LEP * EE.PIN * HLE.PIN
       +  HRIN12 * EE.PIN * HLE.PIN * NRLE.PIN
       +  HRIN16 * EE.PIN * NRLE.PIN
       +  EE.PIN * NRLE.PIN * INVADDQ
       +  INVDATA    ; High density function block
   INVDATA.CLKF =  CLK
   INVDATA.RSTF =  EERESET

/HLEDEL := /HLE    ; Fast function block
   HLEDEL.CLKF =  CLK
   HLEDEL.RSTF =  EERESET

 ERROR6 :=  INVADD0 * INVADD1 * INVADD2 * INVADD3 * HLEDEL
       +  ERROR6    ; Fast function block
   ERROR6.CLKF =  CLK
   ERROR6.RSTF =  VMERESET

 ERROR7 :=  INVADD0 * INVADD1 * INVADD2 * INVADD3 * RLEDEL
       +  ERROR7    ; Fast function block
   ERROR7.CLKF =  CLK
   ERROR7.RSTF =  VMERESET
```



```
/HOVRFLWQ := /HOVRFLWQ */UIM_2    ; Fast function block
   HOVRFLWQ.CLKF =  CLK
   HOVRFLWQ.RSTF =  EERESET

 EVHOVRFL := /UIM_0
       +  HRIN17 * EE.PIN * NRLE.PIN
       +  HRIN13 * EE.PIN * HLE.PIN    ; High density function block
   EVHOVRFL.CLKF =  CLK
   EVHOVRFL.RSTF =  EERESET

/ERROR5 := /ERROR5 */HOVRFLWQ    ; High density function block
   ERROR5.CLKF =  CLK
   ERROR5.RSTF =  VMERESET

/HEVTAG7 :=  EE.PIN */HRIN7.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG7
       + /EE.PIN */HEVTAG7    ; High density function block
   HEVTAG7.CLKF =  CLK

/HEVTAG6 :=  EE.PIN */HRIN6.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG6
       + /EE.PIN */HEVTAG6    ; High density function block
   HEVTAG6.CLKF =  CLK

/HEVTAG5 := /HRIN5 * EE.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG5
       + /EE.PIN */HEVTAG5    ; High density function block
   HEVTAG5.CLKF =  CLK

/HEVTAG4 := /HRIN4 * EE.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG4
       + /EE.PIN */HEVTAG4    ; Fast function block
   HEVTAG4.CLKF =  CLK

/HEVTAG3 := /HRIN3 * EE.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG3
       + /EE.PIN */HEVTAG3    ; High density function block
   HEVTAG3.CLKF =  CLK

/HEVTAG2 := /HRIN2 * EE.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG2
       + /EE.PIN */HEVTAG2    ; High density function block
   HEVTAG2.CLKF =  CLK

/HEVTAG1 := /HRIN1 * EE.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG1
       + /EE.PIN */HEVTAG1    ; High density function block
   HEVTAG1.CLKF =  CLK

/HEVTAG0 := /HRIN0 * EE.PIN * HLE.PIN
       + /HLE.PIN */HEVTAG0
       + /EE.PIN */HEVTAG0    ; Fast function block
   HEVTAG0.CLKF =  CLK

/H10 := /HRIN10 * EE.PIN * HLE.PIN
       + /HLE.PIN */H10
       + /EE.PIN */H10    ; High density function block
   H10.CLKF =  CLK

 LOSTSYNC.T  =  EE * NRLE * HRIN4 */HEVTAG0 */LOSTSYNC
       +  EE * NRLE */HRIN4 * HEVTAG0 */LOSTSYNC
```

```
       +  EE * NRLE * HRIN5 */HEVTAG1 */LOSTSYNC
       +  EE * NRLE */HRIN5 * HEVTAG1 */LOSTSYNC    ; Fast function block
   LOSTSYNC.CLKF =  CLK
   LOSTSYNC.RSTF =  INIT

   LOSTSYNC_1.EXPORT =  EE * NRLE * HRIN6 */HEVTAG2 */LOSTSYNC
           +  EE * NRLE */HRIN6 * HEVTAG2 */LOSTSYNC
           +  EE * NRLE * HRIN7 */HEVTAG3 */LOSTSYNC
           +  EE * NRLE */HRIN7 * HEVTAG3 */LOSTSYNC    ; Fast function block

   LOSTSYNC_2.EXPORT =  EE * NRLE * HRIN8 */HEVTAG4 */LOSTSYNC
           +  EE * NRLE */HRIN8 * HEVTAG4 */LOSTSYNC
           +  EE * NRLE * HRIN9 */HEVTAG5 */LOSTSYNC
           +  EE * NRLE */HRIN9 * HEVTAG5 */LOSTSYNC    ; Fast function block

   LOSTSYNC_3.EXPORT =  EE * NRLE * HRIN10 */HEVTAG6 */LOSTSYNC
           +  EE * NRLE */HRIN10 * HEVTAG6 */LOSTSYNC
           +  EE * NRLE * HRIN11 */HEVTAG7 */LOSTSYNC
           +  EE * NRLE */HRIN11 * HEVTAG7 */LOSTSYNC    ; Fast function block

   LOSTSYNC_4.EXPORT =  EE * NRLE */LOSTSYNC * H10
           +  EE * NRLE * HRIN14 */LOSTSYNC    ; Fast function block

/ICDFERRX  =  ERROR0
       +  ERROR1
       +  ERROR4    ; High density function block

 UIM_0  = /EVHOVRFL */HOVRFLWQ    ; UIM node

 UIM_1  =  HFIFOFULLX * RFIFOFULLX */FIFOOVRFL    ; UIM node

 UIM_2  =  HOVRFLW * HITWEDEL    ; UIM node

 UIM_3  = /ERREN0.PIN * ERROR0    ; UIM node

 UIM_4  = /ERREN1.PIN * ERROR1    ; UIM node

 UIM_5  = /ERREN2.PIN * ERROR2    ; UIM node

 UIM_6  = /ERREN3.PIN * ERROR3    ; UIM node

 UIM_7  = /ERREN4.PIN * ERROR4    ; UIM node

 UIM_8  = /ERREN5.PIN * ERROR5    ; UIM node

 UIM_9  = /ERREN6.PIN * ERROR6    ; UIM node

 UIM_10  = /ERREN7.PIN * ERROR7    ; UIM node
```