```
;;;
```

```
/"ADDDECOD/U74:Q" := /"ADDDECOD/U73:Q"    ; High density function block
   "ADDDECOD/U74:Q".CLKF =  CLK
   "ADDDECOD/U74:Q".PRLD =  VCC


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

   FRZVME.D1 =  IVDATA0.PIN * "ADDDECOD/U183:O"
   FRZVME.D2 = Gnd
   FRZVME.CLKF =  CLK
   FRZVME.RSTF =  INIT
   FRZVME.FBK = /"ADDDECOD/U183:O"

/"ADDDECOD/U160:O"  =  TMOD */"ADDDECOD/U159:O"
       +  BPINIT */"ADDDECOD/U159:O"    ; Fast function block

/CDFERROR_  =  UIM_12    ; High density function block

 "ADDDECOD/U185:O"  = /"MIX/U156:Q" * "MIX/U57:Q" * "`ADDDECOD/XU1[ADDRDECO2]:CD
FERCE"    ; UIM node

 "ADDDECOD/U183:O"  = /"MIX/U156:Q" * "MIX/U57:Q" * "`ADDDECOD/XU1[ADDRDECO0]:FR
ZVMECE"    ; UIM node

 "ADDDECOD/U159:O"  = /WRITEV */AV21 */AV16 */IVADD4 */IVADD3 */IVADD1 * IVADD0
          */"MIX/U156:Q" * "SEL_ADDMOD/U13:EQ" * UIM_0 * UIM_1
          * UIM_3    ; Fast function block

/RESFIFO_  = /"ADDDECOD/U72:Q" * "ADDDECOD/U73:Q"    ; High density function blo
ck

/OSPYBUFR_  =  IFREEZE */ENSPY * "`ADDDECOD/XU1[ADDRDECO4]:OSPYBUFR"    ; Fast f
unction block

/RSPYBUFR_  =  WRITEV */AV23 */AV22 * AV21 * AV20 */AV19 * IFREEZE
          */ENSPY * "MIX/U54:O"    ; Fast function block

/HSPYBUFR_  =  WRITEV */AV23 */AV22 * AV21 */AV20 * AV19 * IFREEZE
          */ENSPY * "MIX/U54:O"    ; Fast function block

/ROUT  = /"`ADDDECOD/XU1[ADDRDECO4]:OSPYBUFR" */"`ADDDECOD/XU1[ADDRDECO0]:ROUT"
   ; High density function block

/INIT := /"ADDDECOD/U160:O" */"ADDDECOD/U72:Q" */"ADDDECOD/U73:Q"
          */"ADDDECOD/U74:Q"    ; High density function block
   INIT.CLKF =  CLK
   INIT.PRLD =  VCC


 "MIX/U57:Q" :=  "MIX/U57:Q".D1 Or "MIX/U57:Q".D2  ; High density function block

   "MIX/U57:Q".D1 =  "MIX/U156:Q" * "MIX/U155:Q"
   "MIX/U57:Q".D2 = Gnd
   "MIX/U57:Q".CLKF =  CLK
   "MIX/U57:Q".SETF =  DSV1.PIN * DSV0.PIN
   "MIX/U57:Q".FBK = /"MIX/U155:Q"
   "MIX/U57:Q".PRLD =  VCC


 DTACKIN_.T  = /DTACKIN_ */"MIX/U57:Q" * "MIX/U155:Q"
```



```
       +  DTACKIN_ * "MIX/U57:Q" * "MIX/U155:Q"    ; Fast function block
   DTACKIN_.CLKF =  CLK
   DTACKIN_.RSTF =  DSV1 * DSV0

 DROE_ := /WRITEV.PIN    ; High density function block
   DROE_.CLKF =  "MIX/U54:O"
   DROE_.SETF = /DROE_ * DOE_ * DSV1.PIN * DSV0.PIN
   DROE_.PRLD =  VCC


 DWOE_ :=  WRITEV.PIN    ; High density function block
   DWOE_.CLKF =  "MIX/U54:O"
   DWOE_.SETF = /DWOE_ * DOE_ * DSV1.PIN * DSV0.PIN
   DWOE_.PRLD =  VCC


/"MIX/U155:Q" := /"MIX/U54:O"    ; Fast function block
   "MIX/U155:Q".CLKF =  CLK
   "MIX/U155:Q".RSTF =  DSV1 * DSV0

/"MIX/U156:Q" :=  "MIX/U155:Q"    ; Fast function block
   "MIX/U156:Q".CLKF =  CLK
   "MIX/U156:Q".SETF =  DSV1 * DSV0

/"MIX/U161:O"  =  DWOE_ * DROE_    ; UIM node

/DTACKE_  =  DTACKIN_.PIN    ; Fast function block

 "MIX/U54:O"  = /DTACKIN_ */DSV1.PIN */DSV0.PIN */ASVR.PIN * "SEL_ADDMOD/U21:EQ"
          * UIM_8
       + /AMV1 */DTACKIN_ */DSV1.PIN */DSV0.PIN */ASVR.PIN * UIM_8
          * UIM_7    ; High density function block

 "MIX/U51:O"  = /ASVR * IACKV * "SEL_ADDMOD/U13:EQ" * "MIX/U37:O" * "MIX/U29:Q"
   ; Fast function block

 "MIX/U40:O"  =  DSV1 * DSV0 * "SEL_ADDMOD/U13:EQ" * UIM_2    ; Fast function bl
ock

/"MIX/U38:O"  = /"MIX/U40:O" */"MIX/U51:O"    ; UIM node

 "MIX/U37:O"  =  "SEL_ADDMOD/U21:EQ"
       + /AMV1 * UIM_7    ; High density function block

/"MIX/U35:O"  = /DSV1 */DSV0    ; Fast function block

/IVADD21  = /AV23
       + /"SEL_ADDMOD/U13:EQ"    ; High density function block

/IVADD20  = /"SEL_ADDMOD/U13:EQ"
       + /AV22    ; High density function block

/IVADD19  = /"SEL_ADDMOD/U13:EQ"
       + /AV21    ; High density function block

/IVADD18  = /"SEL_ADDMOD/U13:EQ"
       + /AV20    ; High density function block

/IVADD17  = /"SEL_ADDMOD/U13:EQ"
       + /AV19    ; High density function block

/IVADD16  = /"SEL_ADDMOD/U13:EQ"
```

```
       + /AV18    ; High density function block

/IVADD15  = /"SEL_ADDMOD/U13:EQ"
       + /AV17    ; High density function block

/IVADD14  = /"SEL_ADDMOD/U13:EQ"
       + /AV16    ; High density function block

/IVADD13  = /"SEL_ADDMOD/U13:EQ"
       + /AV15    ; High density function block

/IVADD12  = /"SEL_ADDMOD/U13:EQ"
       + /AV14    ; High density function block

/IVADD11  = /"SEL_ADDMOD/U13:EQ"
       + /AV13    ; High density function block

/IVADD10  = /"SEL_ADDMOD/U13:EQ"
       + /AV12    ; High density function block

/IVADD9  = /"SEL_ADDMOD/U13:EQ"
       + /AV11    ; High density function block

/IVADD8  = /"SEL_ADDMOD/U13:EQ"
       + /AV10    ; High density function block

/IVADD7  = /"SEL_ADDMOD/U13:EQ"
       + /AV9    ; High density function block

/IVADD6  = /"SEL_ADDMOD/U13:EQ"
       + /AV8    ; High density function block

 WREG0  = /WRITEV */AV23 */AV22 */AV21 */AV20 */AV19 */AV18 */AV17
          */AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5 */IVADD4
          */IVADD3 */IVADD2 */IVADD1 */IVADD0 * "MIX/U54:O"    ; Fast function
block

 "`ADDDECOD/XU1[ADDRDECO0]:RBIT"  = /AV21 */AV20 */AV19 */IVADD4 * IVADD3 * IVAD
D1 * IVADD0
           * WRITEV.PIN * UIM_5 * UIM_6
       + /AV21 */AV20 */AV19 * IVADD4 */IVADD3 */IVADD1 * IVADD0
           * WRITEV.PIN * UIM_5 * UIM_6
       + /AV21 */AV20 */AV19 */IVADD3 * IVADD1 */IVADD0 * WRITEV.PIN
           * UIM_5 * UIM_6    ; High density function block

 "`ADDDECOD/XU1[ADDRDECO0]:FRZVMECE"  = /WRITEV */AV21 */AV16 * TMOD */IVADD4 *
IVADD3 * IVADD1
           * IVADD0 * UIM_0 * UIM_1 * UIM_3    ; Fast function block

 HSPYREGW  = /WRITEV */AV23 */AV22 */AV21 */AV20 */AV19 */AV18 */AV17
          */AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5 */IVADD4
          * IVADD3 * IVADD2 */IVADD1 */IVADD0 * "MIX/U54:O"    ; Fast function
block

 RSPYREGW  = /WRITEV */AV23 */AV22 */AV21 */AV20 */AV19 */AV18 */AV17
          */AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5 */IVADD4
          * IVADD3 * IVADD2 */IVADD1 * IVADD0 * "MIX/U54:O"    ; Fast function
block

 OSPYREGW  = /WRITEV */AV23 */AV22 */AV21 */AV20 */AV19 */AV18 */AV17
          */AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5 */IVADD4
          * IVADD3 * IVADD2 * IVADD1 */IVADD0 * "MIX/U54:O"    ; Fast function
```



```
block

 "`ADDDECOD/XU1[ADDRDECO0]:ROUT"  = /AV21 */AV20 */AV19 */IVADD4 * IVADD3 * IVAD
D1 */IVADD0
           * WRITEV.PIN * UIM_5 * UIM_6    ; High density function block

 RDSWEN  =  WRITEV.PIN * UIM_11    ; High density function block

 HBCTRVEN  =  AV21 * AV20 */AV19 * WRITEV.PIN * UIM_5
       + /AV21 */AV20 */AV19 */IVADD4 * IVADD3 */IVADD2 */IVADD1
           * WRITEV.PIN * UIM_5 * UIM_9 * UIM_10
       + /AV21 */AV20 */AV19 */IVADD4 */IVADD3 * IVADD1 * IVADD0
           * WRITEV.PIN * UIM_5 * UIM_9 * UIM_10
       + /AV21 */AV20 */AV19 */IVADD4 */IVADD3 * IVADD2 * WRITEV.PIN
           * UIM_5 * UIM_9 * UIM_10
       +  AV21 */AV20 * TMOD * WRITEV.PIN * UIM_5 * UIM_9
       +  AV21 */AV20 * AV19 * WRITEV.PIN * UIM_5    ; High density function blo
ck

/WERREN_  = /WRITEV */AV21 */AV16 * IVADD4 */IVADD3 */IVADD1 */IVADD0
           */"MIX/U156:Q" * "MIX/U57:Q" * UIM_0 * UIM_1 * UIM_3    ; Fast functi
on block

/IDPROMR_  = /AV21 * AV20 * WRITEV.PIN * UIM_5    ; High density function block

 RSPYVME  =  WRITEV */AV23 */AV22 * AV21 * AV20 */AV19 * "SEL_ADDMOD/U13:EQ"
; Fast function block

 OSPYVME  =  WRITEV */AV23 */AV22 * AV21 * AV20 * AV19 * "SEL_ADDMOD/U13:EQ"
; Fast function block

 RREG0  =  WRITEV */AV23 */AV22 */AV21 */AV20 */AV19 */AV18 */AV17
           */AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5 */IVADD3
           */IVADD2 */IVADD1 */IVADD0 * "MIX/U54:O"    ; Fast function block

 "`ADDDECOD/XU1[ADDRDECO2]:WTMOD"  = /WRITEV */AV21 */AV16 */IVADD4 */IVADD3 * I
VADD1 */IVADD0
           * "SEL_ADDMOD/U13:EQ" * UIM_0 * UIM_1 * UIM_3    ; Fast function bloc
k

 "`ADDDECOD/XU1[ADDRDECO2]:CDFERCE"  = /WRITEV */AV21 */AV16 * IVADD4 */IVADD3 *
/IVADD1 * IVADD0
           * UIM_0 * UIM_1 * UIM_3    ; Fast function block

 SPYREGR  =  WRITEV */AV23 */AV22 */AV21 */AV20 */AV19 */AV18 */AV17
           */AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5 */IVADD4
           * IVADD3 * IVADD2 * "MIX/U54:O"    ; Fast function block

 HREVME  =  WRITEV * AV21 */AV16 * TMOD */"MIX/U156:Q" * "MIX/U57:Q"
           * UIM_0    ; Fast function block

 RREVME  =  WRITEV * AV21 * AV16 * TMOD */"MIX/U156:Q" * "MIX/U57:Q"
           * UIM_0    ; Fast function block

 HOEVME  =  WRITEV */AV23 */AV22 * AV21 */AV20 */AV19 */AV18 */AV17
           */AV16 * TMOD * "MIX/U54:O"    ; Fast function block

 ROEVME  =  WRITEV */AV23 */AV22 * AV21 */AV20 */AV19 */AV18 */AV17
           * AV16 * TMOD * "MIX/U54:O"    ; Fast function block

 FFSPYRD  =  WRITEV */AV23 */AV22 * AV21 * AV20 */AV19 * "MIX/U54:O"
       +  WRITEV */AV23 */AV22 * AV21 */AV20 */AV18 */AV17 * TMOD
```

```
           * "MIX/U54:O"
       +  WRITEV */AV23 */AV22 * AV21 */AV20 * AV19 * "MIX/U54:O"    ; Fast func
tion block

/AAMSSWR_  = /WRITEV */AV23 * AV22 */AV21 */AV20 */AV19 * TMOD */"MIX/U156:Q"
           * "MIX/U57:Q"
       + /WRITEV * AV23 */AV22 * TMOD */"MIX/U156:Q" * "MIX/U57:Q"    ; Fast fun
ction block

/BAMSSWR_  = /WRITEV */AV23 * AV22 */AV21 */AV20 */AV19 * TMOD */"MIX/U156:Q"
           * "MIX/U57:Q"
       + /WRITEV * AV23 */AV22 * TMOD */"MIX/U156:Q" * "MIX/U57:Q"    ; Fast fun
ction block

 AMSSWR  = /WRITEV */AV23 * AV22 */AV21 */AV20 */AV19 * TMOD * "MIX/U54:O"
       + /WRITEV * AV23 */AV22 * TMOD * "MIX/U54:O"    ; Fast function block

 "`ADDDECOD/XU1[ADDRDECO3]:REGSANDTMOD"  = /AV23 */AV22 */AV21 */AV20 */AV19 */A
V18 */AV17 */AV16
           */AV15 */AV14 */AV13 */AV12 * TMOD    ; UIM node

 "`ADDDECOD/XU1[ADDRDECO4]:OSPYBUFR"  =  AV21 * AV20 * AV19 * WRITEV.PIN * UIM_5
    ; High density function block

 HSPYVME  =  WRITEV */AV23 */AV22 * AV21 */AV20 * AV19 * "SEL_ADDMOD/U13:EQ"
; Fast function block

 PUSHVME  = /WRITEV */IVADD4 * IVADD3 * IVADD1 */IVADD0 */"MIX/U156:Q"
          * "MIX/U57:Q" * UIM_3 * "`ADDDECOD/XU1[ADDRDECO3]:REGSANDTMOD"    ; F
ast function block

/SSVME_  = /AV23 * AV22 */AV21 */AV20 */AV19 * TMOD * "SEL_ADDMOD/U13:EQ"    ; H
igh density function block

/AMVME_  =  AV23 */AV22 * TMOD * "SEL_ADDMOD/U13:EQ"    ; High density function
block

 AMSSRD  =  WRITEV */AV23 * AV22 */AV21 */AV20 */AV19 * TMOD * "MIX/U54:O"
       +  WRITEV * AV23 */AV22 * TMOD * "MIX/U54:O"    ; Fast function block

/"SEL_ADDMOD/U13:EQ"  = /AV27 */ASEL27
       +  AV27 * ASEL27
       + /AV28 */ASEL28
       +  AV28 * ASEL28
       + /AV29 */ASEL29
       +  AV29 * ASEL29
       + /AV30 */ASEL30
       +  AV30 * ASEL30
       + /AV31 */ASEL31
       +  AV31 * ASEL31
       + /UIM_4    ; High density function block

 "SEL_ADDMOD/U21:EQ"  = /AMV5 */AMV4 * AMV3 * AMV1 * AMV0    ; UIM node

 "ADDDECOD/U186:Q" :=  "ADDDECOD/U186:Q".D1 Or "ADDDECOD/U186:Q".D2  ; High dens
ity function block

   "ADDDECOD/U186:Q".D1 =  IVDATA0.PIN * "ADDDECOD/U185:O"
   "ADDDECOD/U186:Q".D2 = Gnd
   "ADDDECOD/U186:Q".CLKF =  CLK
   "ADDDECOD/U186:Q".FBK = /"ADDDECOD/U185:O"
```



```
IVDATA0  =  TMOD */IVADD4 */IVADD0
       + /IVADD4 * IVADD0 * FRZVME
       +  IVADD4 */IVADD0 * CDFERROR_
       +  IVADD4 * IVADD0 * "ADDDECOD/U186:Q"    ; High density function block
  IVDATA0.TRST =  "`ADDDECOD/XU1[ADDRDECO0]:RBIT"

"MIX/U29:Q" := Gnd    ; High density function block
  "MIX/U29:Q".CLKF =  DTACKIN_
  "MIX/U29:Q".SETF =  ASVR.PIN
  "MIX/U29:Q".PRLD =  VCC


DOE_ := Gnd    ; High density function block
  DOE_.CLKF =  "MIX/U161:O"
  DOE_.SETF =  "MIX/U35:O"
  DOE_.PRLD =  VCC


IVADD0 :=  IVADD0.D1 Xor IVADD0.D2  ; High density function block

  IVADD0.D1 = /"MIX/U29:Q"
            +  AV2 * "MIX/U29:Q"
  IVADD0.D2 = Gnd
  IVADD0.CLKF =  "MIX/U38:O"
  IVADD0.FBK = /"MIX/U29:Q"

IVADD1 :=  IVADD1.D1 Xor IVADD1.D2  ; High density function block

  IVADD1.D1 =  IVADD0 */"MIX/U29:Q"
            +  AV3 * "MIX/U29:Q"
  IVADD1.D2 = Gnd
  IVADD1.CLKF =  "MIX/U38:O"
  IVADD1.FBK = /"MIX/U29:Q"

IVADD2 :=  IVADD2.D1 Xor IVADD2.D2  ; High density function block

  IVADD2.D1 =  IVADD1 * IVADD0 */"MIX/U29:Q"
            +  AV4 * "MIX/U29:Q"
  IVADD2.D2 = Gnd
  IVADD2.CLKF =  "MIX/U38:O"
  IVADD2.FBK = /"MIX/U29:Q"

IVADD3 :=  IVADD3.D1 Xor IVADD3.D2  ; High density function block

  IVADD3.D1 =  IVADD2 * IVADD1 * IVADD0 */"MIX/U29:Q"
            +  AV5 * "MIX/U29:Q"
  IVADD3.D2 = Gnd
  IVADD3.CLKF =  "MIX/U38:O"
  IVADD3.FBK = /"MIX/U29:Q"

IVADD4 :=  IVADD4.D1 Xor IVADD4.D2  ; High density function block

  IVADD4.D1 =  IVADD3 * IVADD2 * IVADD1 * IVADD0 */"MIX/U29:Q"
            +  AV6 * "MIX/U29:Q"
  IVADD4.D2 = Gnd
  IVADD4.CLKF =  "MIX/U38:O"
  IVADD4.FBK = /"MIX/U29:Q"

IVADD5 :=  IVADD5.D1 Xor IVADD5.D2  ; High density function block

  IVADD5.D1 =  IVADD4 * IVADD3 * IVADD2 * IVADD1 * IVADD0 */"MIX/U29:Q"
            +  AV7 * "MIX/U29:Q"
```

```
  IVADD5.D2 = Gnd
  IVADD5.CLKF =  "MIX/U38:O"
  IVADD5.FBK = /"MIX/U29:Q"

UIM_0  = /AV23 */AV22 */AV20 */AV19 */AV18 */AV17    ; UIM node

UIM_1  = /AV15 */AV14 */AV13 */AV12    ; UIM node

UIM_2  =  IACKV * "SEL_ADDMOD/U21:EQ" */"MIX/U29:Q"    ; UIM node

UIM_3  = /IVADD5 */IVADD2    ; UIM node

UIM_4  = /AV26 */AV25 */AV24    ; UIM node

UIM_5  = /AV23 */AV22 * "MIX/U54:O"    ; UIM node

UIM_6  = /AV18 */AV17 */AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5
          */IVADD2    ; UIM node

UIM_7  = /AMV5 */AMV4 * AMV3 * AMV0    ; UIM node

UIM_8  = /LWORDV * IACKV */AV1 * "SEL_ADDMOD/U13:EQ"    ; UIM node

UIM_9  = /AV18 */AV17    ; UIM node

UIM_10  = /AV16 */AV15 */AV14 */AV13 */AV12 */IVADD5    ; UIM node

UIM_11  = /AV23 */AV22 */AV21 */AV20 */AV19 */AV18 */AV17 */AV16
          */AV15 */AV14 */AV13 */AV12 */IVADD5 * IVADD4 */IVADD3
          */IVADD2 * IVADD1 * IVADD0 * "MIX/U54:O"    ; UIM node

UIM_12  = /ICDF_ER_ * "ADDDECOD/U186:Q"    ; UIM node
```