JEC-5310



Version 1.0

7 BIOS 16
4.. BFLP 3
4./ BFLP 3
4./.. BFLP 3
4././ 3
4.0 BFLP 4
4.1 Jafk 4
4.2 >asakcba 5
4.3 Cefmpb.t ..... /1
4.4 Pbcrof t.v ..... /2
4.5 Bll t ..... /3
4.6 Pasb#Buf t ..... /4
8 28
5.. ..... /5
5./ DMFL ..... /6
5.0 Tatce Ald 0/
5.0.. Tatce Ald 0/
5.0./ 0/
9 34
6.. 01

1

1.1

1.2

	* GBC*20.-
	* BLU
	* f0* ˡ ɹ ɾ ˡ ح ٧ ﻷ ^

eSPI/LPC/I²C/SM Bus	* . F ² C h * . C>N B rp / . - h
TPM	* PI B 634- TMJ/ . - Ÿ ÿ
PCIe/M.2/ mini-PCIe	* . J . / Hbv* B 0-1/ / 0-2/ 1D / 2D Ÿ M C Fb u. h RP B / . - ÿ * . J . / Hbv*B //0- Ÿ M C Fb u. h RP B / . - ÿ
Watch Dog	* /22 / h
BIOS	* >JF RBCF B FLP
	* Tfk.- h lfkru
	* ./S t l 03S h A C *fk * /Mfk Hυ Hυ Hυ Hυ
	* *1-œ‘ 52œ
	* *.-‘ 3-œ h - . 4 m / p h .-%‘ 52% h
	* Tf t e PPA ч .2D h FB C 3--35*/*/4 h e a ic pfkb h ..mp aro a t flk
	* Tf t e PPA ч /Dom p h FB C 3--35*/*31 h o a kalm h 2 ~ 2--Ew h . eo / a ufp
	* Hυ HυAF N
	* . . 60HD h / . 65HD
L*W*H	* /-- . 1mm Ÿ I ÿ × .1- . 1mm Ÿ T ÿ × 35 . 4mm Ÿ E ÿ

2

2.1

2.2

2.3

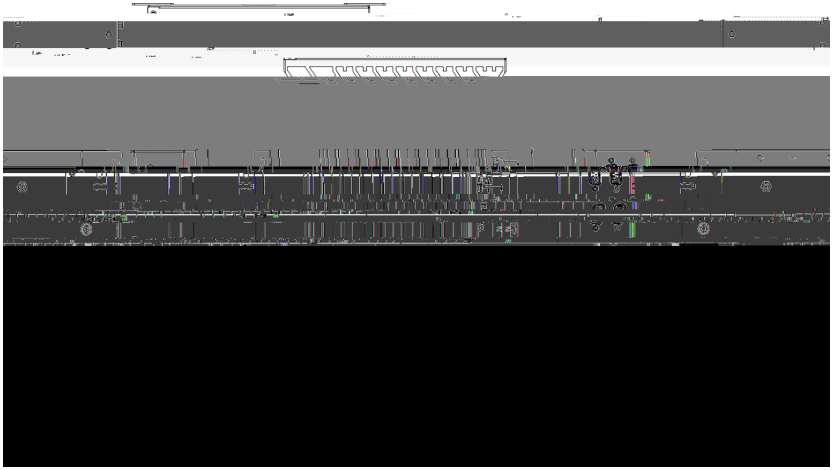
3

3.1

ㄴ.6 ㅣ ɔ Ÿ ÿ ㄴ
ɔ ㄴSBP> ㄴ
ɔ AFN

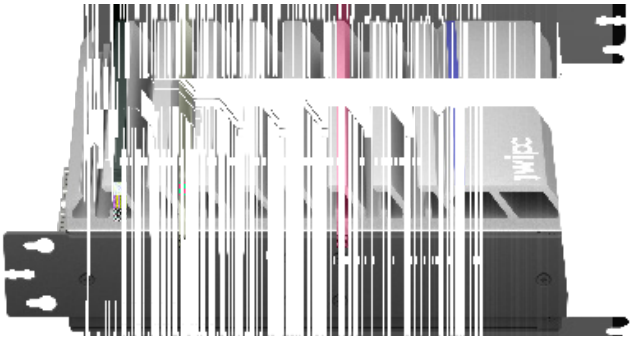
3.2

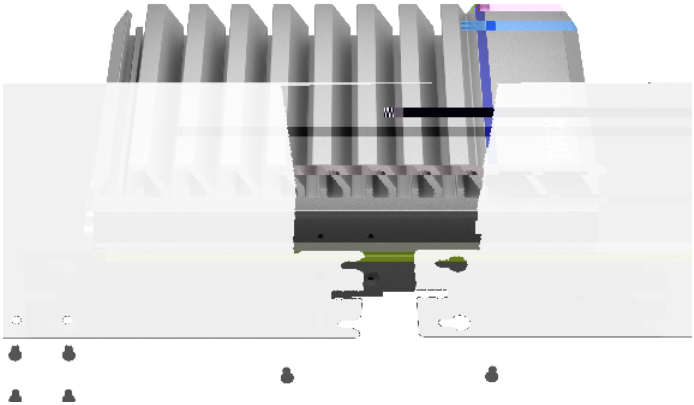
ч m m



3.3 JEC-5310

ч ˆ /) J0 u 2.3G





4

4.1

⚠
G

⚠
G G

⚠
G

G h F / L ŸRPBÿ G F / L G

4.2

ACFN h ч (./S ~ 03S G	

⚠
G

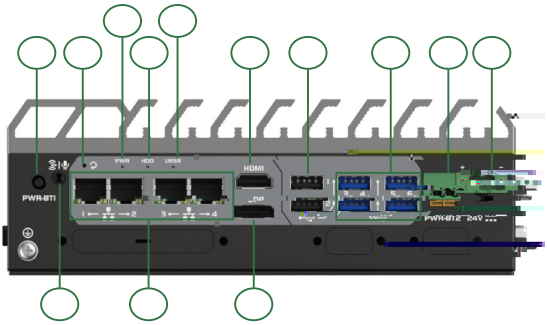
G

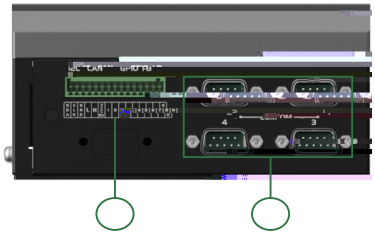
5

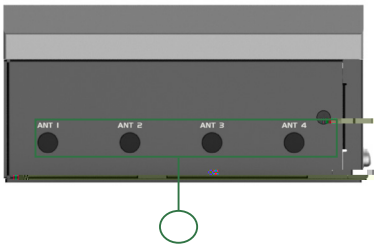
5.1



5.2 IO





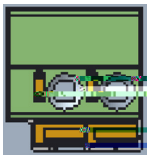


. .MTO _ B T N . ↯
/ . >RAFL ↯ Hυ
0 . OB C LSBO ↯
1 . I> N . / / / 0 / 1 ↯ OG12
2 . MTO ↯
3 . EAA ↯
4 . RPBO7 h B a t t bov llt
5 . EAJF ↯ EAJF
6 . AM ↯ AM
.- . RP B / . - ↯ RP B / . - Tvmb*>
.. . RP B 0 . - ↯ RP B 0 . / Dbk/ Tvmb*>
./ . MTO _ B T N / ↯
.0 . AC _ FN ↯ AC
.1 . DMFL ↯ 0mfk F ² C (0mfk C>N B rp / . - (5mfk DMFL
.2 . CLJ. / / / 0 / 1 ↯
.3 .> N T . / / / 0 / 1 ↯ TFCF

5.3

		LED	
MTO	MC		AC
			MC
EAA			P>T>
			NSJB

5.4 DCIN1

 /	.	DNA
	/	AC _ FN


Advanced
Serial Port 1 Configuration
Serial Port
Device Settings
IO=3F8h; IRQ=4;
Change Settings
[Auto]
COM Port Mode Setting
RS232
RS422
RS485
RS232 RS422 or RS485
F1: General Help

5.6

5.6.1 COM5/COM6

5.6.5 CPU_FAN1

	.	

5.6.6 USB

	.	DNA
	/	RPB_M6_AM
	0	RPB_M6_AN
	1	SCC2

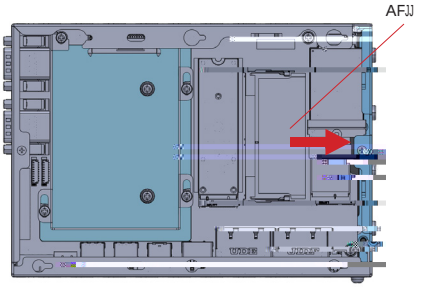
5.6.8 JLVDS1

	.	SCC_ICA_N
	/	SCC0
	0	SCC_ICA_N
	1	SCC2

5.6.9 LVDS

	.	ICA_SCC	/	ICA_SCC
	0	ICA_SCC	1	DNA
	2	DNA	3	DNA
	4	A>T>-N	5	A>T>-M
	6	A>T>.N	.-	A>T>.M
	..	A>T>/N	./	A>T>/M
	.0	DNA	.1	DNA
	.2	CIH._ON	.3	CIH._OM
	.4	A>T>0N	.5	A>T>0M
	.6	A>T>1N	/-	A>T>1M
	/.	A>T>2N	//	A>T>2M
	/0	A>T>3N	/1	A>T>3M
	/2	DNA	/3	DNA
	/4	CIH/_ON	/5	CIH/_OM
	/6	A>T>4N	0-	A>T>4M

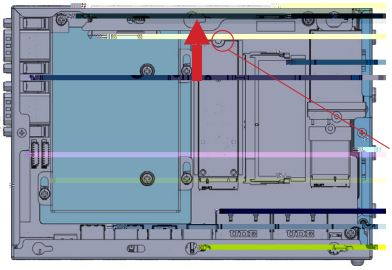
6.2



ч AFJJ h g

ч . . h h
h Ђ
/ . h Ђ
0 . AFJJ Ђ
1 . h AFJJ 0- ° g

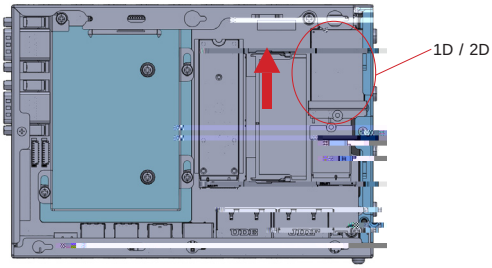
6.3 M.2 2242/2280



ч J . / . J/ h J . / //1/ / //5- P>T> PPA g

ч . . h 0- ° h h Ђ
/ . J . / //1/ h J . / //5- J . / //1/

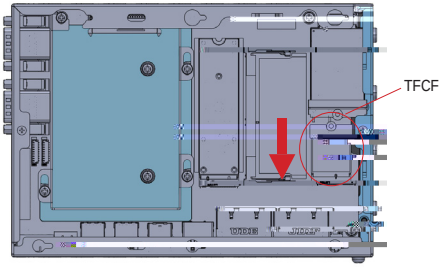
6.4 4G/5G



ч 1D / 2D g

ч 1D / 2D h 0- ° g

6.5 WIFI



ч TFCF g

ч TFCF h 0- ° g

7 BIOS

7.1 BIOS

7.2 BIOS

7.2.1 BIOS

Press <Delete> to enter SETUP

Press <F11> to enter Boot Menu

7.2.2

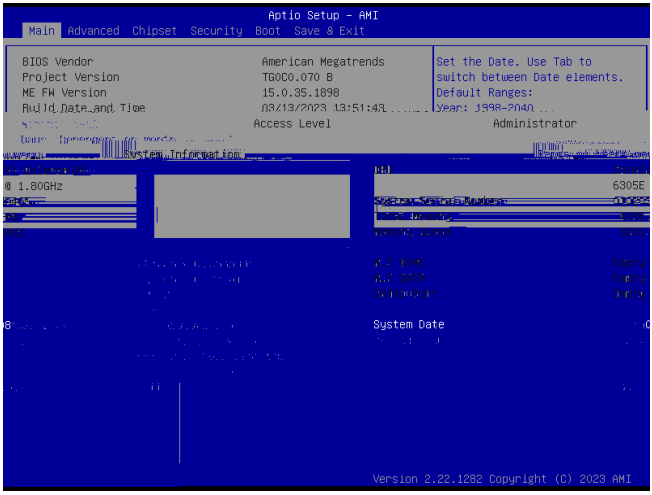
h 9Bk t bo > h 9C. >

G G

7.3 BIOS

J a fk		B FLP
>as a k c ba		B FLP
C efmpb t		
Pb c rof t v		
B ll t		
P a sb # Buf t		B FLP

7.4 Main

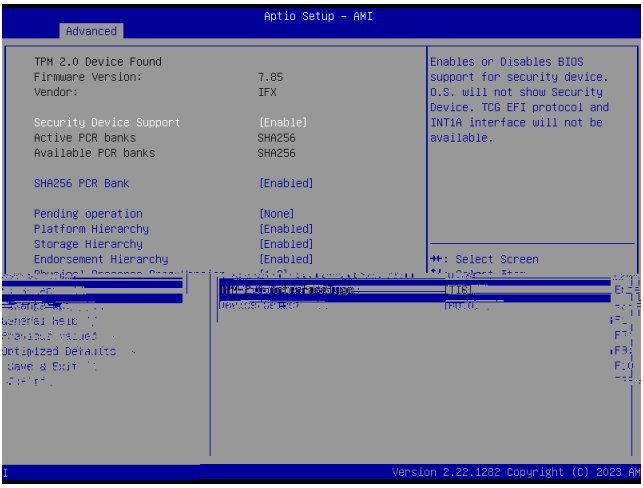


System Date ( )

) d) / / d G

System Time

9 >9 >9 > G



Security Device Support

G ㄐAfp a _iba)Bk a _iba .

SHA256 PCR Bank

PE>/23 MCO B a kh G ㄐAfp a _iba)Bk a _iba .

Pending operation

G ㄐN lkb) T MJ C ib a o .

Platform Hierarchy

G ㄐAfp a _iba)Bk a _iba .

Storage Hierarchy

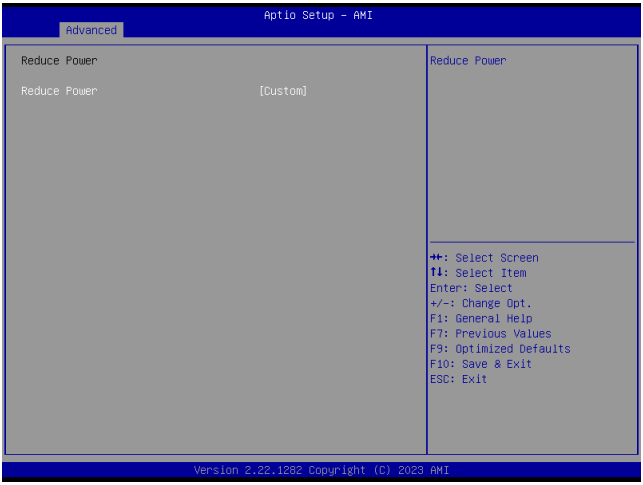
G ㄐAfp a _iba)Bk a _iba .

Endorsement Hierarchy

G ㄐAfp a _iba)Bk a _iba .

Physical Presence Spec Version

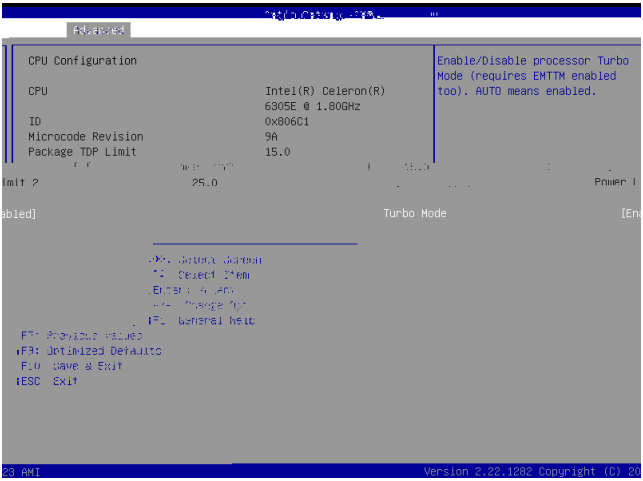
-



Reduce Power

G ч Crp t Im)Afp a_iba)Bk a_iba .

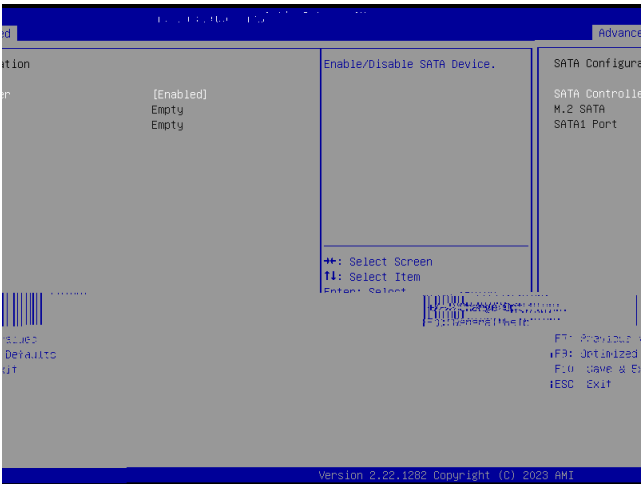
- CMR Clk ž dro a t flk 9Bk t bo > G



Turbo Mode

Tro_l G ч Afp a_iba)Bk a_iba .

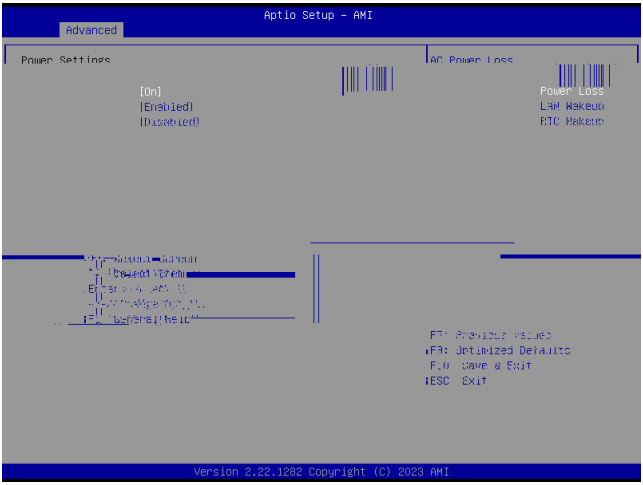
- P>T> Clk ž dro a t flk 9Bk t bo > ɢ



SATA Controller

P>T> ɢ ч Afp a _iba)Bk a _iba .

- Mltbo Pb t t fkdp 9Bk t bo > ɢ



Power Loss

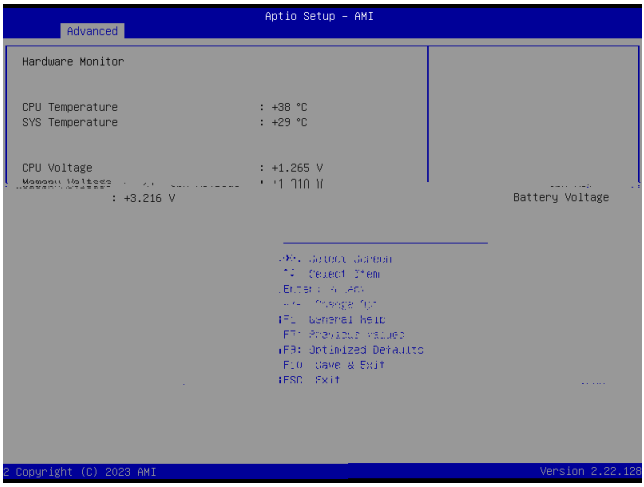
h d d ɢ ч Lk)L ƀ)l a p t P t a t b .

L²N Wakeup

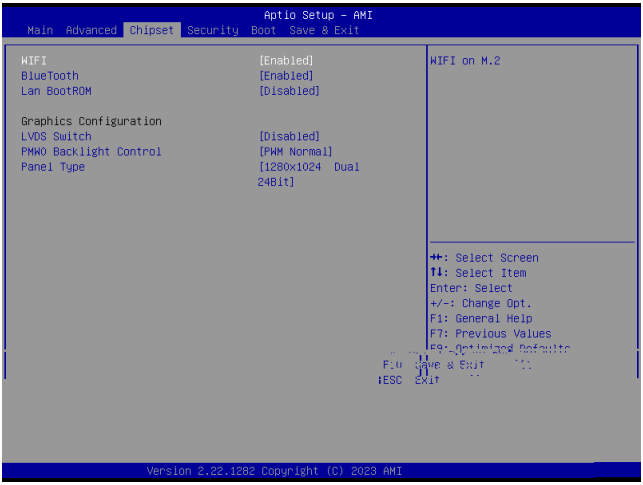
G ч Afp a _iba)Bk a _iba .

d

- E a oat a ob Jlkf t lo 9Bk t bo > G



7.6 Chipset



WIFI

TFCF G ч Afp a _iba)Bk a _iba .

BlueTooth

G ч Afp a _iba)Bk a _iba .

Lan BootROM

G ч Afp a _iba)Bk a _iba .

LVDS Switch

ISAP G ч Afp a _iba)Bk a _iba .

PMWD Back light Control

MJTA G ч MTJ Nlom a i)MTJ Fksbo t ba .

Panel Type

G

7.7 Security

Administrator Password

7.8 Boot



Setup Prompt Timeout

G

Boot NumLock State

N r m l l c h G ч Lk)L ƀ .

Full Screen Logo

G ч Afp a _ib)Bk a _ib .

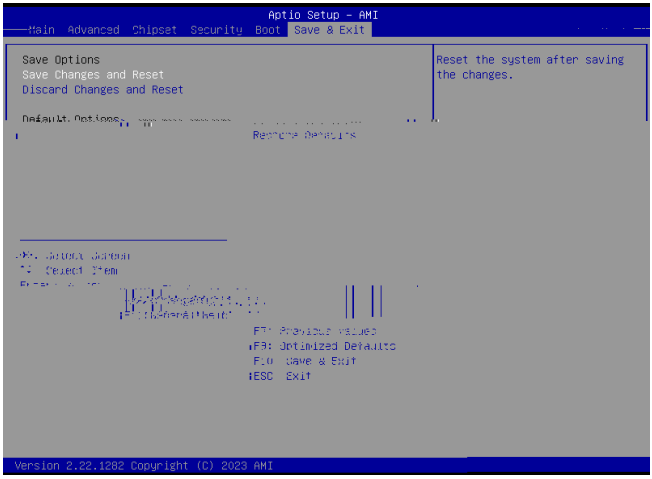
USB Mass Storage Driver Suoport

RP B G ч Afp a _ib)Bk a _ib .

Boot Option #1/2/3/4/5/6/7

. G ч N SJB)E a oa Afph7RBCF LP (M-7 N P2./DPPA01-*F&)RP B E
Afph)RP B Hbv)RP B C A / ASA) N b t tloh)RBCF >M7 RBCF7 B rfi t *fk BCF Pebii .

7.9 Save&Exit



Save Changes and Reset

G

Discard Changes and Reset

G

Restore Defaults

G

8

8.1

```
lfkru          h                          ч
 fk c irab   9p t afl . e >
 fk c irab   9bookl . e >
 fk c irab   9pvp / fl . e >

 / /      FL            .        B v t b
                / *
                                    N a mb7FlOb a a5
                    Dmfl>aaobpp Fkmr t 7DMFL   _ a pb    a aaobpp
                    DMFL   mlo t  Lob ana t 3a irb
                                    Abp c ofm t flk7
                / * /

rkpfdkba    c e a o   FlOb a a5 ( rkpfdkba    pelo t    Dmfl>aaobpp&   x

                 rkpfdkba    c e a o   ob t 8

                 ob t     =    flmi ( 0&8

                 fc     ( ob t &

                 x

                                    mofk t c ( " ob t     =    %a \ k ")   ob t &8

                                    mofk t c ( " bookl    =    %a \ k ")   bookl&8

                                    mofk t c ( " boolo    clo    flmi \ k " &8

                                    ob t rok    .8

                  }

             ob t rok    fk_ ( Dmfl>aaobpp&8

}

 / /      FL           .    B v t b
rkpfdkba    c e a o   FlTof t b5 ( rkpfdkba    pelo t    Dmfl>aaobpp)   rkpfdkba    c e a o   A a  t  a&   x
```

```
/ / a .          Prmbo   FL       Clk ž dro a t flk   Jlab
FlTof t b5 ( F T B5453 _ Fkabu _ Mlo t )   -u54&8
FlTof t b5 ( F T B5453 _ Fkabu _ Mlo t )   -u-.&8
FlTof t b5 ( F T B5453 _ Fkabu _ Mlo t )   -u22&8
FlTof t b5 ( F T B5453 _ Fkabu _ Mlo t )   -u22&8

/ / _ .                  DMFL)  IAN   4
FlTof t b5 ( F T B5453 _ Fkabu _ Mlo t )-u-4&8
FlTof t b5 ( F T B5453 _ A a  t  a  _ Mlo t )DMFL _ IAN _ ABSFCB&8

    Prmbo   FL   DMFL   Dolrm   4        ч
/ / c .          DMFL   Dolrm4        4- ~ 44          DMFŸ      ÿ       h
RFN T 5   B f t L ƀ pb t 8
RFN T 5   DmflNrm_bo8
/ / Lƀpb t   -u c b)   _f t p   - ~ 4                - h DMFL4- ~ 44          DMFŸ      ÿ      ɢ    / /
                DMF        DML h                  DMFL h        DMFL4/ h                    DMF h
    DML h             DMF          DML ɢ
clo ( DmflNrm_bo = -u4-8   DmflNrm_bo9 = -u448   DmflNrm_bo((&
x
              B f t L ƀ pb t   =   DmflNrm_bo   *   -u4-8
              FlTof t b5 ( F T B5453 _ Fkabu _ Mlo t )DMFL4 _ F N MR T _ LR T MR T _ OBDFP T BO&8
              A a  t  a 5   =   FlOb a a5 ( F T B5453 _ A a  t  a _ Mlo t &8
              A a  t  a 5   =   A a  t  a 5# ( ~ ( -u.99 B f t L ƀ pb t &&8
              FlTof t b5 ( F T B5453 _ A a  t  a _ Mlo t )A a  t  a 5&8
}

/ /        DMFL   Dolrm4        4- ~ 44          DML Ÿ      ÿ      h                  / /   ɢ L ƀ pb t
- ~ 4              . h DMFL4- ~ 44          DML Ÿ      ÿ      ɢ
clo ( DmflNrm_bo = -u4-8   DmflNrm_bo9 = -u448   DmflNrm_bo((&
x
              B f t L ƀ pb t   = DmflNrm_bo   *   -u4-8
              FlTof t b5 ( F T B5453 _ Fkabu _ Mlo t )DMFL4 _ F N MR T _ LR T MR T _ OBDFP T BO&8
              A a  t  a 5   =   FlOb a a5 ( F T B5453 _ A a  t  a _ Mlo t &8
              A a  t  a 5   =   A a  t  a 5y ( -u.99 B f t L ƀ pb t &8
              FlTof t b5 ( F T B5453 _ A a  t  a _ Mlo t )A a  t  a 5&8
}

/ / a .       DMFL       ɢ      ч            DML                DMFL       h       DMF            ɢ
/ / DMFL4 _ A>T> _ OBDFP T BO h _f t p- ~ 4              DMFL4- ~ 44              ɢ       _f t
        DMFL              h       .          ɢ
clo ( DmflNrm_bo = -u4-8   DmflNrm_bo9 = -u448   DmflNrm_bo((&
x
              B f t L ƀ pb t   =   DmflNrm_bo   *   -u4-8
              A a  t  a 5   =   FlOb a a5 ( DMFL4 _ A>T> _ OBDFP T BO&8
              A a  t  a 5   #= ~ ( -u.99 B f t L ƀ pb t &8 / /        _f t          - h       DMFL
              / / A a  t  a 5   y =   -u.99 B f t L ƀ pb t 8   / *        _f t            .   h       DMFL
              FlTof t b5 ( DMFL4 _ A>T> _ OBDFP T BO)A a  t  a 5&8
}

/ / b .          DMFL                h DMFL4 _ A>T> _ OBDFP T BO h _f t p- ~ 4
DMFL4- ~ 44              ɢ
```

```
Clo ( DmflNrm_bo = -u4-8  DmflNrm_bo9 = -u448  DmflNrm_bo((&
x
            BftLƀpbt  =  DmflNrm_bo  *  -u4-8
            Aat a5  =  FlObaa5 ( DMFL4 _ A>T> _ OBDFPTBO&8
            Aat a5  =  Aat a5> > BftLƀpbt 8
            Aat a5  =  Aat a5  #-u.8
}
fc ( Aat a5#-u.&x
                              obtrok  .8 / /  DMFL
                    } bipbx
                              obtrok  -8 / /  DMFL
}

    Prmbo  FL  DMFL  Dolrm5  ч
/ / c*. .  DMFL  Dolrm5  5- ~ 54  DMFŸ  ÿ  h  ɢ
RFNT5  BftLƀpbt 8
RFNT5  DmflNrm_bo8
/ /  FN _ LRT _ PBI _ OBD _ DM5  _ftp  - ~ 4  - h DMFL5- ~ 54  DMFŸ  ÿ
    DMFL  DMF  DMLh  / / DMFLh  DMFL5/ h
    DMFh  DMLh  DMF  DMLɢ
clo ( DmflNrm_bo = -u5-8  DmflNrm_bo9 = -u548  DmflNrm_bo((&
x
            BftLƀpbt  =  DmflNrm_bo  *  -u5-8
            FlToftb5 ( FTB5453 _ Fkabu _ Mlot )  DMFL5 _ FNMRT _ LRTMRT _ OBDFPTBO&8
            Aat a5  =  FlObaa5 ( FTB5453 _ Aat a _ Mlot &8
            / / DMFL5- ~ 54  Aat a5  Bft - ~ Bft 4h  Bft  h
            Aat a5  =  Aat a5# ( ~ ( -u.99 BftLƀpbt &&8
            FlToftb5 ( FTB5453 _ Fkabu _ Mlot )  DMFL5 _ FNMRT _ LRTMRT _ OBDFPTBO&8

            FlToftb5 ( FTB5453 _ Aat a _ Mlot )Aat a5&8
}

/ /  DMFL  Dolrm5  5- ~ 54  DMLŸ  ÿ  h  / /  ɢFN _ L
OBD _ DM5  _ftp  - ~ 4  . h DMFL5- ~ 54  DMLŸ  / /  ÿ  ɢ
clo ( DmflNrm_bo = -u5-8  DmflNrm_bo9 = -u548  DmflNrm_bo((&
x
            BftLƀpbt  = DmflNrm_bo  *  -u5-8
            FlToftb5 ( FTB5453 _ Fkabu _ Mlot )  DMFL5 _ FNMRT _ LRTMRT _ OBDFPTBO&8
            Aat a5  =  FlObaa5 ( FTB5453 _ Aat a _ Mlot &8
            / / DMFL5- ~ 54  Aat a5  Bft - ~ Bft 4h  Bft  .h
            Aat a5  =  Aat a5y ( -u.99 BftLƀpbt &8
            FlToftb5 ( FTB5453 _ Fkabu _ Mlot )  DMFL5 _ FNMRT _ LRTMRT _ OBDFPTBO&8
            FlToftb5 ( FTB5453 _ Aat a _ Mlot )Aat a5&8
}

/ / a*. .  DMFL  ɢ  ч  DML  DMFL  h  DMF
    ɢ
/ /  FN _ LRT _ A>T> _ OBD _ DM5 h _ftp- ~ 4  DMFL5- ~ 54  ɢ
    _ft  -  h  DMFL  h  .  ɢ
clo ( DmflNrm_bo = -u5-8  DmflNrm_bo9 = -u548  DmflNrm_bo((&
x
            BftLƀpbt  =  DmflNrm_bo  *  -u5-8
```

```
                //                    DMFL          h
                // dFN_LRT_A>T>_OBD_DM5d              Aata  Lbpbt  Obdfptbo
                Aata5  =  FlObaa5(DMFL_B>PB_>AAOBPP  (  FN_LRT_A>T>_OBD_DM
                Aata5  #=~(-u.99BftLbpbt&8//      _ft        -h      DMFL
                //Aata5  y=  -u.99BftLbpbt8  /*      _ft        .h      DMFL
                FlToftb5(DMFL_B>PB_>AAOBPP  (  FN_LRT_A>T>_OBD_DM5)Aata5&8
}

//b*..          DMFL            hFN_LRT_A>T>_OBD_DM5h_ftp-~4            DMFL
   G
Clo(DmflNrm_bo=-u5-8  DmflNrm_bo9=-u548  DmflNrm_bo((&
x
                BftLbpbt  =  DmflNrm_bo  *  -u5-8
                Aata5  =  FlObaa5(DMFL_B>PB_>AAOBPP  (  FN_LRT_A>T>_OBD_DM
                Aata5  =  Aata5>>BftLbpbt8
                Aata5  =  Aata5  #-u.8
}
fc(Aata5#-u.&x
                                obtrok  .8//      DMFL
                        }bipbx
                                obtrok  -8//      DMFL
}

//c.        Prmbo  FL      Clkždroatflk  Jlab
FlToftb5(FTB5453_Fkabu_Mlot)  -u-/&8
FlToftb5(FTB5453_Fkabu_Mlot)  -u-/&8  //      Prmbo  FL  Clkždroatflk  Jlab
                )              Clkždroatflk  Jlabg
```

8.3 Watch Dog

```
5.0..  Tatce  Ald

.HUTatceAld                          2     h              CMR          h
Tatcealdh                      G
/HU                      h           TatceAld                  Tatceald
  h                    h      Tatceald      G

5./

            TAT
            abžkb  PrmboFL_Fkabu_Mlot                -u/B
            abžkb  PrmboFL_Aata_Mlot                     -u/C
            abžkb  TAT_IAN_ABSFCB                       -u-4

            //a.        Prmbo  FL      Clkždroatflk  Jlab
            FlToftb5(PrmboFL_Fkabu_Mlot t)  -u54&8
            FlToftb5(PrmboFL_Fkabu_Mlot)  -u-.&8
            FlToftb5(PrmboFL_Fkabu_Mlot)  -u22&8
            FlToftb5(PrmboFL_Fkabu_Mlot)  -u22&8
```

```
        / / _ .                DMFL)  IAN   4)       DM.-          TAT
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u-4&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t   )   TAT _ IAN _ ABSFCB&8

        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u/2&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t   )   ( FlOb a a5 ( PrmboFL _ A a t a _ Mlo t &

        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u C -&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t   )   ( FlOb a a5 ( PrmboFL _ A a t a _ Mlo t &

        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u C 5&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t   )   ( FlOb a a5 ( PrmboFL _ A a t a _ Mlo t &

        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -uC.&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t   )   ( FlOb a a5 ( PrmboFL _ A a t a _ Mlo t &

        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -uC1&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t   )   ( FlOb a a5 ( PrmboFL _ A a t a _ Mlo t &

        / / c .   Cib a o   TAT
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u4.&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t   )   ( ( FlOb a a5 ( PrmboFL _ A a t a _ Mlo t

        / / a .        TAT              h
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u4/&8
        A a t a5   =   FlOb a a5 ( PrmboFL _ A a t a _ Mlo t   &8
        A a t a5   =   ( A a t a5#-u c -&y-u c -8   / / TAT
        / /   A a t a5   =   ( A a t a5#-u1-&y-u1-8   / * TAT                    * /
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t )   A a t a5   &8

         / / b .        TAT h TAT          - ~ /22 h          - h      TAT              h
h                              G
        RFN T 5   T fmbo8
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )-u40&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t )T fmbo&8   / /          T fmbo
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )-u41&8
         FlTof t b5 ( PrmboFL _ A a t a _ Mlo t )-u--&8   / /          T fmbo              -u
           G

        / / c .          TAT
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )-u40&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo)   -u--&8

        / / d .        Ÿ      ÿ TAT    T fmbo
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )-u40&8
        FlTof t b5 ( PrmboFL _ A a t a _ Mlo t )T fmbo&8   / / T fmbo                    .

        / / e .          Prmbo   FL        C lk ž dro a t flk   Jlab
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u-/&8
        FlTof t b5 ( PrmboFL _ Fkabu _ Mlo t )   -u-/&8 / /        Prmbo   FL   C lk ž dro a t flk
        / / PrmboFL                                )                C lk ž dro a t flk   Jlab G
```

9

9.1

		/
		.Ʉ /Ʉ ./
	ɗ d	
		ɢ h
		.Ʉ /Ʉ 0Ʉ h
		ÿ ÿ Ʉ
		ÿ Tfkmb ÿ h h
FĦL h		MCF FP> Ʉ Ʉ h
	BFLP	h BFLP Pb t rm h BFLP Pb t rm
BFLP h		
Bll t absf c b kl t h clrka	BFLP h	BFLP ɗ d (Bll t & h
RPB	RPB / . - h RPB / . -	RPB / . -
	RPB	.Ʉ RPB lbd a c v Prmmlo t Ÿ RPB ÿ /Ʉ h