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가 BioStar

BioStar

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BioStar

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[CoreStation]

CoreStation

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Ethernet

Zone Master BioStar V2.x 가 Zone 가 (Master ↔ Member)
Ethernet TCP 1.x Entrance Limit, Fire Alarm Zone

- [BS2_GetDeviceZone](#): Ethernet 가
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- [BS2_GetDeviceZoneAGEntranceLimit](#): Ethernet Access Group 가
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- [BS2_SetDeviceZoneAGEntranceLimit](#): Ethernet Access Group
- [BS2_RemoveDeviceZoneAGEntranceLimit](#): Ethernet Access Group
- [BS2_RemoveAllDeviceZoneAGEntranceLimit](#): Ethernet Access Group

```
typedef void (*OnCheckGlobalAPBViolation)(uint32_t deviceId, uint16_t seq, const char* userID_1, const char* userID_2, bool isDualAuth);
```

1. *OnCheckGlobalAPBViolation*

BS2ZoneStatus

```
typedef struct {  
    uint32_t id;  
    uint8_t status;  
    uint8_t disabled;  
    uint8_t reserved[6];  
} BS2ZoneStatus;
```

1. *id*

2. *status*

0	
1	
2	scheduled lock
4	scheduled unlock

3. *disabled*

flag

4. *reserved*

BS2ApbMember

```
typedef struct {  
    uint32_t deviceID;
```

```

    uint8_t type;
    uint8_t reserved[3];
} BS2ApbMember;

```

1. *deviceID*

2. *type*

APB reader

-1	
0	
1	

3. *reserved*

BS2TimedApbMember

```

typedef struct {
    uint32_t deviceID;
    uint8_t reserved[4];
} BS2TimedApbMember;

```

1. *deviceID*

2. *reserved*

BS2FireSensor

```

typedef struct {
    uint32_t deviceID;
    uint8_t port;
    uint8_t switchType;
    uint8_t duration;
} BS2FireSensor ;

```

1. *deviceID*

2. *port*

3. *switchType*

0	
1	

4. *duration*

millisecond

BS2AntiPassbackZone

```
typedef struct {
    uint32_t zoneID;
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint8_t type;
    uint8_t numReaders;
    uint8_t numBypassGroups;
    uint8_t disabled;
    uint8_t alarmed;
    uint8_t reserved[3];
    uint32_t resetDuration;
    BS2Action alarm[BS2_MAX_APB_ALARM_ACTION];
    BS2ApbMember readers[BS2_MAX_READERS_PER_APB_ZONE];
    uint8_t reserved2[512];
    uint32_t bypassGroupIDs[BS2_MAX_BYPASS_GROUPS_PER_APB_ZONE];
} BS2AntiPassbackZone;
```

1. *zoneID*

1 가

가

2. *name*

BioStar

3. *type*

0	Hard APB(가)
1	Soft APB()

4. *numReaders*

APB reader

5. *numBypassGroups*

APB

6. *disabled*

flag

7. *alarmed*8. *reserved*9. *resetDuration*

가 APB

0

BioStar

10. *alarm*

가 APB

5

11. *readers*

64

12. *reserved2*13. *bypassGroupIDs*

APB

16

BS2TimedAntiPassbackZone

```
typedef struct {
    uint32_t zoneID;
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint8_t type;
    uint8_t numReaders;
    uint8_t numBypassGroups;
    uint8_t disabled;
    uint8_t alarmed;
    uint8_t reserved[3];
    uint32_t resetDuration;
    BS2Action alarm[BS2_MAX_TIMED_APB_ALARM_ACTION];
    BS2TimedApbMember readers[BS2_MAX_READERS_PER_TIMED_APB_ZONE];
    uint8_t reserved2[320];
    uint32_t bypassGroupIDs[BS2_MAX_BYPASS_GROUPS_PER_TIMED_APB_ZONE];
} BS2TimedAntiPassbackZone;
```

1. *zoneID*

1

가

2. *name*

BioStar

3. type

0	Hard APB() 가
1	Soft APB()

4. numReaders

reader

5. numBypassGroups

6. disabled

flag

7. alarmed

8. reserved

9. resetDuration

가

0

BioStar

10. alarm

가

5

11. readers

64

12. reserved2

13. bypassGroupIDs

16

BS2FireAlarmZone

```
typedef struct {
    uint32_t zoneID;
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint8_t numSensors;
    uint8_t numDoors;
    uint8_t disabled;
```

```

uint8_t alarmed;
uint8_t reserved[8];
BS2FireSensor sensor[BS2_MAX_FIRE_SENSORS_PER_FIRE_ALARM_ZONE];
BS2Action alarm[BS2_MAX_FIRE_ALARM_ACTION];
uint8_t reserved2[32];
uint32_t doorIDs[BS2_MAX_DOORS_PER_FIRE_ALARM_ZONE];
} BS2FireAlarmZone;

```

1. zoneID

1 가

2. name

BioStar

3. numSensors

4. numDoors

5. alarmed

6. disabled

flag

7. reserved

8. sensor

8

9. alarm

5

10. reserved2

11. doorIDs

32

BS2ScheduledLockUnlockZone

```

typedef struct {
    uint32_t zoneID;
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint32_t lockScheduleID;
    uint32_t unlockScheduleID;
    uint8_t numDoors;
    uint8_t numBypassGroups;
    uint8_t numUnlockGroups;
    uint8_t bidirectionalLock;
}

```

```

uint8_t disabled;
uint8_t alarmed;
uint8_t reserved[6];
BS2Action alarm[BS2_MAX_SCHEDULED_LOCK_UNLOCK_ALARM_ACTION];
uint8_t reserved2[32];
uint32_t doorIDs[BS2_MAX_DOORS_IN_SCHEDULED_LOCK_UNLOCK_ZONE];
uint32_t
bypassGroupIDs[BS2_MAX_BYPASS_GROUPS_IN_SCHEDULED_LOCK_UNLOCK_ZONE];
uint32_t
unlockGroupIDs[BS2_MAX_UNLOCK_GROUPS_IN_SCHEDULED_LOCK_UNLOCK_ZONE];
} BS2ScheduledLockUnlockZone;

```

1. zoneID

1 가

2. name

BioStar

3. lockScheduleID

4. unlockScheduleID

5. numDoors

6. numBypassGroups

7. numUnlockGroups

가

8. bidirectionalLock

9. disabled

flag

10. alarmed

11. reserved

12. alarm

5

13. reserved2

14. doorIDs

32

15. bypassGroupIDs

16. *unlockGroupIDs*

가

16

BS2IntrusionAlarmZone

```

typedef struct {
    uint32_t zoneID;
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint8_t armDelay;
    uint8_t alarmDelay;
    uint8_t disabled;
    uint8_t reserved[1];
    uint8_t numReaders;
    uint8_t numInputs;
    uint8_t numOutputs;
    uint8_t numCards;
    uint8_t numDoors;
    uint8_t numGroups;
    uint8_t reserved2[10];
} BS2IntrusionAlarmZone;

```

1. *zoneID*

1 가

2. *name*

BioStar

3. *armDelay*

4. *alarmDelay*

5. *disabled*

flag

6. *reserved[1]*

7. *numReaders*

8. *numInputs*

9. *numOutputs*

10. *numCards*

11. *numDoors*

12. *numGroups*

13. *reserved*

BS2IntrusionAlarmZoneBlob

```
typedef struct {
    BS2IntrusionAlarmZone IntrusionAlarmZone;
    BS2AlarmZoneMember* memberObjs;
    BS2AlarmZoneInput* inputObjs;
    BS2AlarmZoneOutput* outputObjs;
    BS2CSNCard* cardObjs;
    BS2_D00R_ID* doorIDs;
    BS2_ACCESS_GROUP_ID* groupIDs;
} BS2IntrusionAlarmZoneBlob;
```

1. *IntrusionAlarmZone*

2. *memberObjs*

IntrusionAlarmZone.numReaders

3. *inputObjs*

IntrusionAlarmZone.numInputs

4. *outputObjs*

IntrusionAlarmZone.numOutputs

5. *cardObjs*

IntrusionAlarmZone.numCards

[Smartcard API](#)

6. *doorIDs*

IntrusionAlarmZone.numDoors

7. *groupIDs*

IntrusionAlarmZone.numGroups

BS2InterlockZone

```
typedef struct {
    uint32_t zoneID;
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint8_t disabled;
    uint8_t numInputs;
    uint8_t numOutputs;
    uint8_t numDoors;
    uint8_t reserved[8];
} BS2InterlockZone;
```

1. *zoneID*

1 가

2. *name*

BioStar

3. *disabled*

flag

4. *numInputs*

5. *numOutputs*

6. *numDoors*

7. *reserved*

BS2InterlockZoneBlob

```
typedef struct {
    BS2InterlockZone InterlockZone;
    BS2InterlockZoneInput* inputObjs;
    BS2InterlockZoneOutput* outputObjs;
    BS2_D00R_ID* doorIDs;
} BS2InterlockZoneBlob;
```

1. *InterlockZone*

2. *inputObjs*

InterlockZone.numInputs

3. *outputObjs*

InterlockZone.numOutputs

4. doorIDs

InterlockZone.numDoors

BS2DeviceZoneEntranceLimitMaster

```
typedef struct {
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint8_t type;
    uint8_t reserved1[3];
    uint32_t entryLimitInterval_s;
    uint8_t numEntranceLimit;
    uint8_t numReaders;
    uint8_t numAlarm;
    uint8_t numBypassGroups;
    uint8_t maxEntry[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE];
    uint32_t periodStart_s[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE];
    uint32_t periodEnd_s[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE];
    BS2DeviceZoneEntranceLimitMemberInfo
    readers[BS2_MAX_READERS_PER_DEVICE_ZONE_ENTRANCE_LIMIT];
    BS2Action alarm[BS2_MAX_DEVICE_ZONE_ENTRANCE_LIMIT_ALARM_ACTION];
    BS2_ACCESS_GROUP_ID
    bypassGroupIDs[BS2_MAX_BYPASS_GROUPS_PER_DEVICE_ZONE_ENTRANCE_LIMIT];
    uint8_t reserved3[8 * 4];
} BS2DeviceZoneEntranceLimitMaster;
```

1. name

BioStar

2. type

1	Soft EntranceLimit(가)
2	Hard EntranceLimit()

3. reserved1[3]

4. entryLimitInterval_s

5. numEntranceLimit

6. numReaders

reader

7. numAlarm

8. numBypassGroups

9. maxEntry

10. periodStart_s

가 ()

11. periodEnd_s

가 ()

12. readers

64

13. alarm

5

14. bypassGroupIDs

16

15. reserved3

BS2DeviceZoneEntranceLimitMember

```
typedef struct {
    uint16_t masterPort;
    BS2_DEVICE_ZONE_ENTRANCE_LIMIT_DISCONNECTED_ACTION_TYPE
actionInDisconnect;
    uint8_t reserved1[1];
    BS2_IPV4_ADDR masterIP;
} BS2DeviceZoneEntranceLimitMember;
```

1. masterPort

master port

2. actionInDisconnect

Disconnect

1	Soft EntranceLimit Disconnected action()	가
---	---	---

2	Hard EntranceLimit Disconnected action()

3. *reserved1[3]*

4. *masterIP*

master IP

BS2DeviceZoneFireAlarmMaster

```
typedef struct {
    char name[BS2_MAX_ZONE_NAME_LEN];
    uint8_t numReaders;
    uint8_t numAlarm;
    uint8_t reserved1[2];
    BS2DeviceZoneFireAlarmMemberInfo
    readers[BS2_MAX_READERS_PER_DEVICE_ZONE_FIRE_ALARM];
    BS2Action alarm[BS2_MAX_DEVICE_ZONE_FIRE_ALARM_ALARM_ACTION];
    uint8_t reserved2[8 * 40];
} BS2DeviceZoneFireAlarmMaster;
```

1. *name*

BioStar

2. *numReaders*

3. *reserved1*

4. *readers*

5. *alarm*

5

6. *reserved2*

BS2DeviceZoneFireAlarmMember

```
typedef struct {
    BS2_PORT masterPort;
    uint8_t reserved1[2];
    BS2_IPV4_ADDR masterIP;
    uint8_t numSensors;
```

```

uint8_t numDoors;
uint8_t reserved2[2];
BS2DeviceZoneFireSensor
sensor[BS2_MAX_FIRE_SENSORS_PER_DEVICE_ZONE_FIRE_ALARM_MEMBER];
union {
    BS2_D00R_ID
doorIDs[BS2_MAX_D00RS_PER_DEVICE_ZONE_FIRE_ALARM_MEMBER];
    BS2_LIFT_ID
liftIDs[BS2_MAX_D00RS_PER_DEVICE_ZONE_FIRE_ALARM_MEMBER];
};
} BS2DeviceZoneFireAlarmMember;

```

1. *masterPort*

master port .

2. *reserved1*

.

3. *masterIP*

master IP .

4. *numSensors*

.

5. *numDoors*

.

6. *reserved2*

.

7. *sensor*

8 .

8. *doorIDs*

8 .

9. *liftIDs*

Lift

8 .

BS2DeviceZoneFireAlarmMemberInfo

```

typedef struct {
    uint32_t readerID;
} BS2DeviceZoneFireAlarmMemberInfo;

```

1. *readerID*

.

BS2DeviceZoneFireSensor

```
typedef struct {
    uint32_t deviceID;
    uint8_t port;
    uint8_t switchType;
    uint16_t duration;
} BS2DeviceZoneFireSensor;
```

1. *deviceID*

2. *port*

3. *switchType*

0	
1	

4. *duration*

millisecond

BS2DeviceZone

```
typedef struct {
    uint32_t zoneID;
    uint8_t zoneType;
    uint8_t nodeType;
    uint8_t enable;
    uint8_t reserved[1];
    union {
        BS2DeviceZoneEntranceLimitMaster entranceLimitMaster;
        BS2DeviceZoneEntranceLimitMember entranceLimitMember;
        BS2DeviceZoneFireAlarmMaster fireAlarmMaster;
        BS2DeviceZoneFireAlarmMember fireAlarmMember;
    };
} BS2DeviceZone;
```

1. *zoneID*

1 가

2. *zoneType*

3. *nodeType*

4. *enable*

flag

5. *reserved[1]*

BS2DeviceZoneAGEntranceLimit

```

typedef struct {
    uint32_t zoneID;
    uint16_t numAGEntranceLimit;
    uint16_t reserved1;
    uint32_t periodStart_s[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE];
    uint32_t periodEnd_s[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE];
    uint16_t numEntry[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE];
    uint16_t
maxEntry[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE][BS2_MAX_ACCESS_GROUP_ENTRANCE_LIMI
T_PER_ENTRANCE_LIMIT];
    uint32_t
accessGroupID[BS2_MAX_ENTRANCE_LIMIT_PER_ZONE][BS2_MAX_ACCESS_GROUP_ENTRANCE
_LIMIT_PER_ENTRANCE_LIMIT];
} BS2DeviceZoneAGEntranceLimit;

```

1. *zoneID*

1 가

2. *numAGEntranceLimit*

3. *reserved1*

4. *periodStart_s*

가

5. *periodEnd_s*

가

6. *numEntry*

7. *maxEntry*

8. *accessGroupID*

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