

TEMU *GRCAN Model*

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Table of Contents

| | |
|------------------------------------|---|
| 1. Introduction | 1 |
| 2. Loading the Plugin | 1 |
| 3. Attributes | 1 |
| 3.1. Properties | 1 |
| 3.2. Interfaces | 2 |
| 3.3. Ports | 2 |
| 4. Registers | 2 |
| 4.1. Register Bank default | 2 |
| 4.1.1. Register cfg | 2 |
| 4.1.2. Register stat | 3 |
| 4.1.3. Register ctrl | 3 |
| 4.1.4. Register syncMaskFilt | 3 |
| 4.1.5. Register syncCodeFilt | 3 |
| 4.1.6. Register pendIrq | 3 |
| 4.1.7. Register irqMask | 4 |
| 4.1.8. Register txChanCtrl | 4 |
| 4.1.9. Register txChanAddr | 4 |
| 4.1.10. Register txChanSize | 4 |
| 4.1.11. Register txChanWr | 5 |
| 4.1.12. Register txChanRd | 5 |
| 4.1.13. Register txChanIrq | 5 |
| 4.1.14. Register rxChanCtrl | 5 |
| 4.1.15. Register rxChanAddr | 6 |
| 4.1.16. Register rxChanSize | 6 |
| 4.1.17. Register rxChanWr | 6 |
| 4.1.18. Register rxChanRd | 6 |
| 4.1.19. Register rxChanIrq | 6 |
| 4.1.20. Register rxChanMask | 7 |
| 4.1.21. Register rxChanCode | 7 |
| 5. Limitations | 7 |

1. Introduction

The GRCAN model is available in the GrCan plugin.

2. Loading the Plugin

```
import GrCan
```

3. Attributes

3.1. Properties

| Name | Type | Description |
|-------------------|---------------------|--|
| bus | iref / CanBusIface | CAN bus |
| cfg | uint32_t | Configuration register |
| config.irq | uint8_t | Interrupt number |
| config.singleIrq | uint8_t | Single interrupt |
| ctrl | uint32_t | Control register |
| irqCtrl | iref / IrqCtrlIface | IRQ controller |
| irqMask | uint32_t | Interrupt register |
| mem | iref / MemoryIface | Memory |
| object.timeSource | object | Time source object (a cpu or machine object) |
| pendIrq | uint32_t | Pending interrupt register |
| rxChanAddr | uint32_t | RX channel address register |
| rxChanCode | uint32_t | RX channel code register |
| rxChanCtrl | uint32_t | RX channel control register |
| rxChanIrq | uint32_t | RX channel irq register |
| rxChanMask | uint32_t | RX channel mask register |
| rxChanRd | uint32_t | RX channel read register |
| rxChanSize | uint32_t | RX channel size register |
| rxChanWr | uint32_t | RX channel write register |
| stat | uint32_t | Status register |
| syncCodeFilt | uint32_t | SYNC code filter register |

| Name | Type | Description |
|--------------|----------|-----------------------------|
| syncMaskFilt | uint32_t | SYNC mask filter register |
| txChanAddr | uint32_t | TX channel address register |
| txChanCtrl | uint32_t | TX channel control register |
| txChanIrq | uint32_t | TX channel irq register |
| txChanRd | uint32_t | TX channel read register |
| txChanSize | uint32_t | TX channel size register |
| txChanWr | uint32_t | TX channel write register |

3.2. Interfaces

| Name | Type | Description |
|----------------|----------------|-------------------------------------|
| ApbIface | ApbIface | APB P&P interface |
| CanDevIface | CanDevIface | CAN device interface |
| MemAccessIface | MemAccessIface | Memory access interface (registers) |

3.3. Ports

| Prop | Iface | Description |
|------|-------|-------------|
| - | - | - |

4. Registers



Register support is currently experimental!

4.1. Register Bank default

4.1.1. Register cfg

Congifuation register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.2. Register stat

Status register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.3. Register ctrl

Control register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.4. Register syncMaskFilt

SYNC mask filter register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.5. Register syncCodeFilt

SYNC code filter register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.6. Register pendlrq

Pending interrupt register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.7. Register irqMask

Interrupt register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.8. Register txChanCtrl

TX channel control register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.9. Register txChanAddr

TX channel address register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.10. Register txChanSize

TX channel size register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.11. Register txChanWr

TX channel write register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.12. Register txChanRd

TX channel read register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.13. Register txChanIrq

TX channel irq register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.14. Register rxChanCtrl

RX channel control register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.15. Register rxChanAddr

RX channel address register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.16. Register rxChanSize

RX channel size register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.17. Register rxChanWr

RX channel write register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.18. Register rxChanRd

RX channel read register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.19. Register rxChanIrq

RX channel irq register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.20. Register rxChanMask

RX channel mask register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

4.1.21. Register rxChanCode

RX channel code register

Cold reset value: 0x0

Warm reset value: 0x0

| Field | Mask | Cold | Warm | Description |
|-------|------|------|------|-------------|
| - | - | - | - | - |

5. Limitations

- None