|  |  |  |  |
| --- | --- | --- | --- |
| Offset APB | Register name | width | Description |
| 0x00 | Tx\_apb\_addr | 8 | Slave address 7bit |
| 0x04 | Rx\_status | 8 |  |
| 0x08 | tx\_apb\_data | 8 | Transmit data register |
| 0x0C | rx\_apb\_data | 8 | Reciver data register |
| 0x10 | Tx\_apb\_data\_cnt | 8 | Number byte |
| 0x14 | Status | 8 | Status register |
| 0x18 | Tx\_ctrl | 16 | Control register |

Status register

|  |  |  |  |
| --- | --- | --- | --- |
| field | name | width | reset |
| [7:4] | - | 4 | - |
| 3 | I2c\_done | 1 | 0 |
| 2 | Sta | 1 | 0 |
| 1 | Sto | 1 | 0 |
| 0 | rw | 1 | 0 |

Control register

|  |  |  |  |
| --- | --- | --- | --- |
| Field | name | width | reset |
| [15:13] | - | 3 | - |
| 12 | Mode\_i2c | 1 | 0 |
| 11 | I\_ready | 1 | 0 |
| [10:0] | Div\_cnt | 11 | 0 |

tx\_apb\_data\_cnt register

|  |  |  |  |
| --- | --- | --- | --- |
| Field | name | width | reset |
| [7:0] | Data\_cnt | 8 | 0 |

Tx\_apb\_addr

|  |  |  |  |
| --- | --- | --- | --- |
| Field | name | width | reset |
| [7:0] | Data\_adrr\_rw ,addr\_device | 8 | 0 |