initialization TWAR with TWCR after that, TWI Interface waits until its slave address (or a broadcast address) to be addressed. When followed by the data direction bit slave address is "0" When (Write operations), TWI Into the slave receive mode. When the data direction bit "1" When the (read operation shown) TWI In slave transmit mode. After receiving his slave address and a write flag, TWINT Flag bit is set, the status code is also effective to update TWSR in. In response to each state will be described in detail in the appropriate code status code table. Note that, when the host mode TWI After arbitration loss can also enter slave receive mode (see Status Code 0x68 with 0x78).

If during transmission TWEA Bit is reset, TWI Will return after receiving a byte NACK (High level) to SDA

on-line. This may be used to represent not receive more data from the machine. when TWEA Bit "0" Time, TWI It will not respond to its own slave address. but TWI We will continue to monitor the bus, once TWEA Is set, it can recognize and respond to the address recover. In other words, you can use TWEA Temporarily TWI Isolated from the bus interfaces.

In the sleep modes except the idle mode, TWI Clock interface can be turned off. If the slave can receive mode, the interface will continue to respond with a bus clock slave address or a broadcast address. Will then wake MCU . During the wake,

TWI Interface will remain SCL Low until TWINT Flag is cleared. when TWI After normal interface clock may receive more data.

From the state machine receiving the code pattern in the following table:

State machine receiving mode code table

status code Bus and hardware status		Response application software					Hardware next move
		Read / Write TWDR	Correct TWCR Operations				
			STA	STO	TWINT	TWEA	
0x60	SLA + W Received; ACK Has been sent	No action	x	0	1	0	The received data; Will send NACK
		No action	x	0	1	1	The received data; Will send ACK
0x68 send SLA + R / W Time Arbitration failure; SLA + W Received; ACK Has been sent		No action	x	0	1	0	The received data; Will send NACK
		No action	x	0	1	1	The received data; Will send ACK
0x70 Broadcast address has been received; ACK Has been sent		No action	x	0	1	0	The received data; Will send NACK
		No action	x	0	1	1	The received data; Will send ACK
0x78 send SLA + R / W Time Arbitration failure; SLA + W Received; ACK Has been sent		No action	x	0	1	0	The received data; Will send NACK
		No action	x	0	1	1	The received data; Will send ACK
0x80 Own data has been received; ACK Has been sent		Read data	x	0	1	0	The received data; Will send NACK
		Read data	x	0	1	1	The received data; Will send ACK
0x88 Own data has been received; read 0				0	1	0	Will switch to unaddressed