



BEGIN

Set TWI clock  
(CLDIV, CHDIV, CKDIV) in TWIHS\_CWGR  
(Needed only once)

Set the Control register:  
- Host enable  
TWIHS\_CR = MSEN + SVDIS + ACMEN

Set the Host mode register:  
- Device clientaddress  
Set the Alternative Command Register:  
- DATAL  
- DIR = READ

Start the transfer  
TWIHS\_CR = START

Read TWIHS\_SR

RXRDY = 1?

No

Yes

Read TWIHS\_FSR  
and get the number of data in the Receive FIFO

Read TWIHS\_RHR

All data have been read  
in TWIHS\_RHR ?

No

Yes

Read Status register

TXCOMP = 1?

No

Yes

END