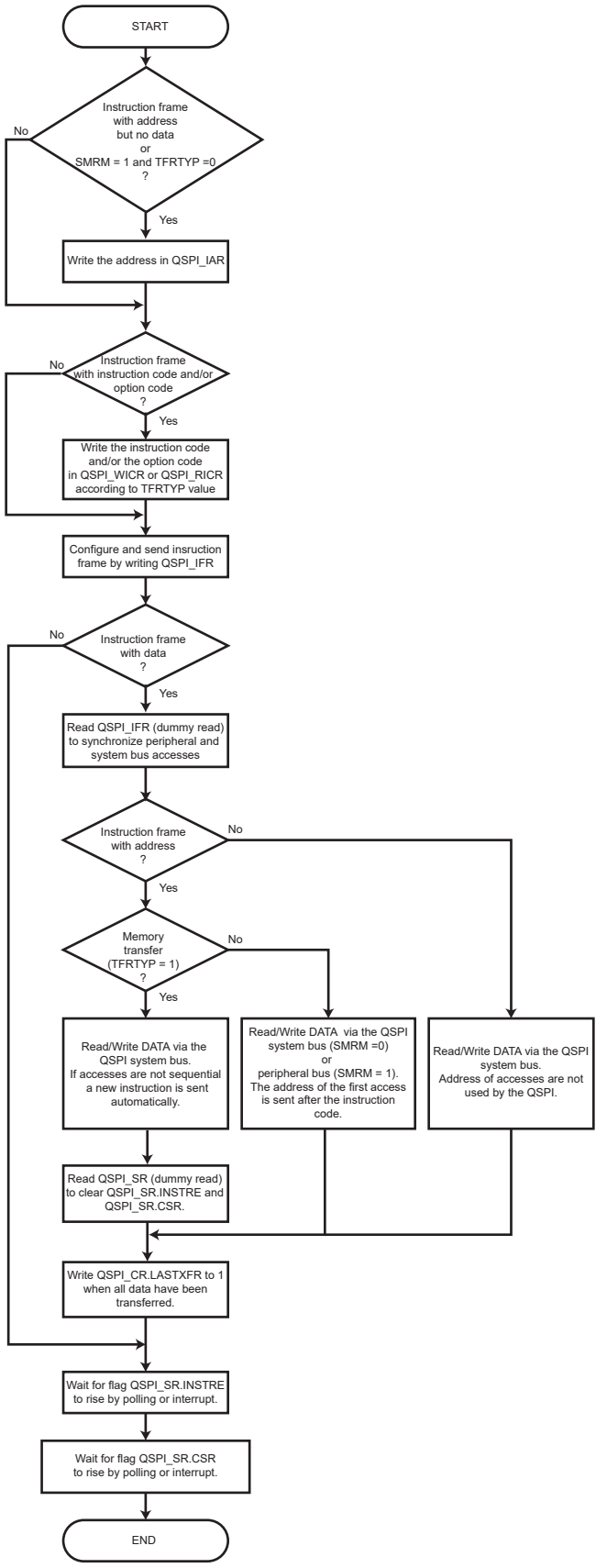
START
Instruction frame with address but no data or SMRM = 1 and TFRTYP =0 ?
No
Yes
Write the address in QSPI_IAR
Instruction frame with instruction code and/or option code ?
No
Yes
Write the instruction code and/or the option code in QSPI_WICR or QSPI_RICR according to TFRTYP value
Configure and send insruction frame by writing QSPI_IFR
Instruction frame with data ?
No
Yes
Read QSPI_IFR (dummy read) to synchronize peripheral and system bus accesses
Instruction frame with address ?
No
Yes
Memory transfer (TFRTYP = 1) ?
No
Yes
Read/Write DATA via the QSPI system bus. If accesses are not sequential a new instruction is sent automatically.
Read/Write DATA via the QSPI system bus (SMRM =0) or peripheral bus (SMRM = 1). The address of the first access is sent after the instruction code.
Read/Write DATA via the QSPI system bus. Address of accesses are not used by the QSPI.
Read QSPI_SR (dummy read) to clear QSPI_SR.INSTRE and QSPI_SR.CSR.
Write QSPI_CR.LASTXFR to 1 when all data have been transferred.
Wait for flag QSPI_SR.INSTRE to rise by polling or interrupt.
Wait for flag QSPI_SR.CSR to rise by polling or interrupt.
END