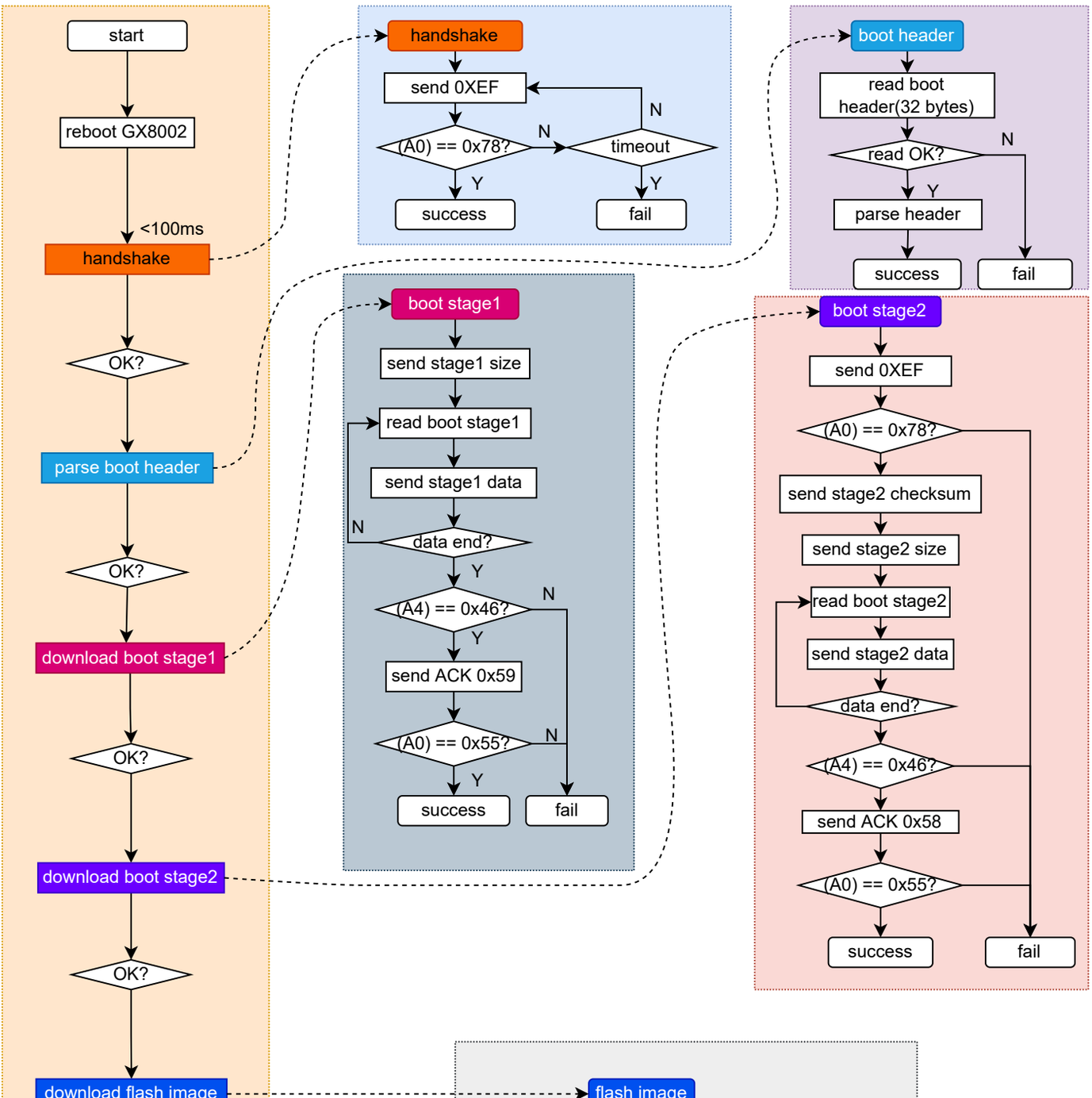
I2C升级协议流程图


start
reboot GX8002
<100ms
handshake
OK?
parse boot header
OK?
download boot stage1
OK?
download boot stage2
OK?
download flash image
reboot GX8002
end
handshake
send 0XEF
(A0) == 0x78?
N
timeout
N
Y
Y
success
fail
boot header
read boot header(32 bytes)
read OK?
N
Y
parse header
success
fail
boot stage1
send stage1 size
read boot stage1
send stage1 data
N
data end?
Y
(A4) == 0x46?
N
Y
send ACK 0x59
(A0) == 0x55?
N
Y
success
fail
boot stage2
send 0XEF
(A0) == 0x78?
send stage2 checksum
send stage2 size
read boot stage2
send stage2 data
data end?
(A4) == 0x46?
send ACK 0x58
(A0) == 0x55?
success
fail

flash image
get image size
send flash offset
send flash img size
send flash block size
(A4) == 0x43?
Y
read image
send image data
Y
send size == flash block?
N
N
data end?
Y
(A4) == 0x44?
N
Y
(A4) == 0x46?
Y
success
fail