## SETUP

START

EEPROM READ
LED MATRIX INIT
CLEAR DISPLAY
DISPLAY DRIVER INIT

END

## LOOP

START

CONNECTION STATUS = WIFI? — TRUE → WIFI PROCESS

CONNECTION STATUS = BT? — TRUE → PROCESS BT

CONNECTION INIT

## CONNECTION INIT

START

TRUE ← CONNECTION STATUS = WIFI?

RETRIES = 20

WIFI STATUS = NOT CONNECTED? — TRUE → RETRIES -- → RETRIES = 0?

FALSE

CONNECTION STATUS = WIFI
WIFI CONNECTION INFO
EEPROM WRITE

CONNECTION USING BT
CONNECTION STATUS = BT

END

## PROCESS BT

START

FALSE

## CONNECT USING BT

START

SERIALBT
BEGIN

SERIALBT = AVAILABLE?

FALSE

READ

READ = "WIFISTART"?

FALSE

CONNECTION
STATUS = NCON

SCROLL
DISPLAY

END

BEGIN

SERIALBT = HAS CLIENT?

READ
BLUETOOTH
DATA

READ = ?

"BLUE"

"SSID"

READ = "PASS"?

CONNECTION
STATUS = WIFI

END

WIFI
PROCESS

START

WIFISTATUS = NOT
CONNECTED?

CONNECTION
STATUS = NCON

FALSE

READ REQUEST
DATA

SCROLL
DISPLAY

CONNECTION
STATUS = WIFI

END

DISPLAY
DRIVER
TASK

START

WRITE
ARRAYTX TO
DISPLAY SHIFT
REGISTER

SCROLL
DISPLAY

START

TIMESTAMP > 500 MILLI?

TRUE

SCROLL VAR
UPDATE

ARRAYTX =
CONVERT
(DISPLAYRGB)

CONNECTION
STATUS = BT

END