

Controller

redLED: *Object DigitalOutput
greenLED: *Object DigitalOutput
powerSensorsCH1: *Object DigitalOutput
powerSensorsCH2: *Object DigitalOutput
sh_cp: *Object DigitalOutput
st_cp: *Object DigitalOutput
ds: *Object DigitalOutput
ds3231rtc.*Object DS3231RTC
sdCard.*Object sdCard
aht20Bmp280: *Object Aht20Bmp280
analogInputs: *Object AnalogInput
valvesDecValue. uint8_t
checkSoilWetness: bool
checkRainSensor: bool
checkTemperature: bool
lowTemperature: int8_t
highTemperature: int8_t
ruleNames: char**
keysNum: uint8_t
measuredSensorsValuePercentageString: String
measuredValueAnalogSensorsArray: int[]
thresholdAnalogSensorsArray: int[]
temperature: float
relativeHumidity: float
airPressure: float
systemRefreshInterval: uint32_t
maxDryness: int
maxWetness: int
activeRuleExists: bool
wateringDurationTime: uint32_t
newValvesDecValue: uint8_t
ftpServerStarted: bool
ddnsEnabled: bool
wifi32s: *Object WiFi32s

Controller()

valueToPercentage(int analogInputValue_): int
controllerDigitalOutputInit(): bool
controllerDS3231RTCInit(): bool
controllerSDCardInit(): bool
controllerAht20Bmp280Init(): bool
controllerAnalogInputsInit(): bool
analogSensorsThresholdValues(): bool
getSystemGlobalValues(): bool
valvesTurnOffOn(uint8_t valves): void
controllerGetAht20Bmp280Data(): bool
controllerWiFi32sInit(): bool
controllerPrepareWatering(): bool
controllerStoreSensorsValue(): void
controllerCheckWateringRules(): void
getSensorsValueCH1(): void
getSensorsValueCH2(): void
getGreenLED(): *DigitalOutput
getRedLED(): *DigitalOutput
getPowerSensorsCH1(): *DigitalOutput
getPowerSensorsCH2(): *DigitalOutput
getSdCard(): *SDCard
getDs3231rtc(): *DS3231RTC

DS3231RTC

DS3231RTC()
i2c24C32EEPROMReadByte(unsigned int eaddress_): byte
i2c24C32EEPROMWritePage(byte *data_, byte length_): uint8_t
init(): bool
isRtcRunning(): bool
getDateNow: String
getDateTimeNow: String
oldLogFileDate: String
getAdminPwd(): String
setAdminPwd(): String
getUnixTimeNow(): uint32_t

SDCard

wsIni: *minIni
ds3231rtc: *Object DS3231RTC

SDCard()
init(): bool
writeLogFile(String logMessage_): bool
removeOldLogFiles(): void
getValueFromIni(const String §ion_, const String &key_, String &value): void
saveValueToIni(String section_, String key_, String value_): bool
getNumKeysInSection(const String §ion): uint8_t
getKeysArray(String section_, char **arr): bool
deleteKey(const String §ion_, const String &key_): bool

Aht20Bmp280

Aht20Bmp280()
init(): bool
getAht20Bmp280Data(float &temperatue_, float &humdity_, float &pressure_): bool

AnalogInput

result: esp_err_t
analogPin: adc1_channel_t
const adc_atten_t scaleVoltage = ADC_ATTEN_11db
rainSensors_1_2: *Object AnalogInput
wetnessSensor_1_5: *Object AnalogInput
wetnessSensor_2_6: *Object AnalogInput
wetnessSensor_3_7: *Object AnalogInput
wetnessSensor_4_8: *Object AnalogInput

AnalogInput()
AnalogInput(const adc1_channel_t analogPin_)
init(): bool
storeAnalogInputPinValue(const gpio_num_t powerChannel_, int *array_): void

DigitalOutput

digiGpioNum: gpio_num_t
result: esp_err_t

DigitalOutput(const gpio_num_t &digiGpioNum_)
init(): bool
setLevel(const uint32_t &level_): void
getDigiGpioNum(): gpio_num_t

InterruptTimer1

timer1Conf: timer_config_t

InterruptTimer1()
initInterruptTimer1(): bool

WiFi32s

staIP: *Object IPAddress
staSubnet: *Object IPAddress
staGateway: *Object IPAddress
staPrimaryDNS: *Object IPAddress
htmFile: *char
ftp: *Object FTPServer
cntrl: *Object Controller
htmlFileMemoryAllocated: bool
client: WiFiClient
jsonOutput: String
apiPString: String
staIPString: String
staEnabled: int
staStaticIP: int
ddnsProvider: String
ddnsHost: String

WiFi32s(Controller *cntrl_);
stringToIPAdress(const char *data_, IPAddress *address_): bool
openHtm(String htmFileName_): void
init(int apHidden_, const char *apSSID_, const char *apPWD_, int apChannel_, int apMaxConnection_, int staSet_, const char *staSSID_, const char *staPWD_, int staStaticIp_, const char *staIP_, const char *staSubnet_, const char *staGateway_, const char *staDNS_, int ddns_, const char *ddnsProvider_, const char *ddnsHost_,const char *ddnsUserName_, const char *ddnsPassword_): bool
server = AsyncWebServer(80): Object AsyncWebServer
startWebHtm(): void
startFTPServer(): bool
saveWifiSettings(AsyncWebServerRequest *request_): bool
saveDelRuleSettings(AsyncWebServerRequest *request_): bool
saveGlobalSettings(AsyncWebServerRequest *request_): bool
logWebTraffic(AsyncWebServerRequest *request, const String message): void
sendResponseToClient(AsyncWebServerRequest *request_, int httpCode_, String htmFileName_): void
notFound(AsyncWebServerRequest *request): void