关于仪表控制函数产生器的文档

# 仪表名称、地址

Set INSTRPATH = I:\0\_5\_.Lab\p\_Program\MatlabInstrument

## 保存位置

仪表名称、地址保存于

%INSTRPATH%\globalADDR.xlsx

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Abbr | Brand | Model | Vendor | Type | Addr | Information | BaudRate |
| VSG | Agilent | E8267D | agilent | GPIB/LAN | 22 | PSG Vector Signal Generator |  |
| SG | Agilent | E8257D | agilent | GPIB/LAN | 19 | PSG Signal Generator |  |
| MXG | Agilent | N5183A | agilent | GPIB/LAN | 19 | MXG Signal Generator |  |
| PSA | Agilent | E4446A | agilent | GPIB/LAN | 18 | PSA Series Spectrum Analyzer |  |
| DSO | Agilent | 81204B | agilent | GPIB/LAN | 7 | Digital Sample Oscilloscope |  |
| DCA | Agilent | 86100C | agilent | GPIB/LAN | 9 | Digital Communication Analyzer |  |
| NA | Agilent | 8510C | agilent | GPIB | 16 | Network Analyzer |  |
| PNA | Agilent | E8364B | agilent | GPIB/LAN | 16 | PNA Network Analyzer |  |
| LAS | Agilent | 8164A | agilent | GPIB | 17 | Lightwave Mainframe |  |
| TDS | Tektronix | TDS220 |  | GPIB |  | Digital Real-time Oscilloscope |  |
| ED | Anritsu | MP1762A | agilent | GPIB | 6 | Error Detector |  |
| PPG | Anritsu | MP1761B | agilent | GPIB | 8 | Pulse Pattern Generator |  |
| LDC | ILX Lightwave | LDC-3724B | agilent | GPIB | 12 | Laser Diode Controller |  |
| ESG | Agilent | E4433B | agilent | GPIB | 23 | ESG-D Series Signal Generator |  |
| PWS | Agilent | U2002H | agilent | USB |  | Power Sensor |  |
| DC | Itech | IT6322 | agilent | ASRL |  | DC Power Supply | 38400 |
| OSA | Advantest | Q8384 | agilent | GPIB | 15 | Optical Spectrum Analyzer | 38400 |
| TDCM | TeraXion | TDCM30 | agilent | ASRL |  | Tunable Dispersion Compensator Module |  |
| DMM | Fluke | 8840A | agilent | GPIB | 14 | Digital Multimeter |  |
| AFG | Tektronix | AFG320 | tek | GPIB | 1 | Arbitrary Function Generator |  |
| PM | Agilent | 437B | agilent | GPIB | 13 | Power Meter |  |

## 仪表名称地址初始化程序globalADDR

初始化程序位于%INSTRPATH%\initGlobalADDR.m

产生的全局地址变量存于%INSTRPATH%\globalADDR.m

% globalADDR.m

% FUNCTION HEAD%

% Instrument Handler

global g\_addr\_VSG; % Agilent …

% Instrument Address

% GPIB Instrument

g\_addr\_VSG = 22; % Agilent E8267D PSG Vector Signal Generator

% LAN Instrument

g\_addr\_lan\_VSG = 0; % Agilent E8267D PSG Vector Signal

% VXI Instrument

% ASRL Instrument

baud\_DC = 38400;

% USB Instrument

g\_addr\_usb\_PWS = 0; % Agilent U2002H Power Sensor

## 仪表控制库初始化

%INSTRPATH%\initInstLibrary通过globalADDR.xlsx文件的数据信息，调用initInstrument产生各仪表的基础控制函数，包括如下几个步骤

% initInstrument

%% Create Directory

%% Create iiInit File

% Export function head

% process sHandle according to instrument type

% Error control for opened instrument

% Export Definition;

% Get address

% get the address with VISA RSRCNAMEs

%% Create iiDestroy File

% Export function head

% Export Definition;

%% Create iiRead File

%% Create iiReadData File

%% Create iiWrite File

%% Create iiQuery File

%% Create iiQueryData File

% iiInit, iiDestroy, iiRead, iiWrite, iiQuery

% iiReadData, iiQueryData