智能人机界面整体解决方案供应商

Intelligent human-machine interface overall solutions supplier

YL-HMI

KGUS系统屏

YL-HMI080T8060KRK-04

用户手册

云利科技

深圳市云利科技有限公司

目录 contents

云利科技

一. 硬件介绍 Hardware introduction

二. 软件介绍 Software introduction

目录 contents

云利科技

一 硬件介绍 Hardware introduction

云利科技

产品材质 Material

高效的ESD静电防护功能 High eficiency ESD electrostatic protection

- 产品机身采用SG高耐蚀性钢板材质，面板采用铝合金材质
- Body use SG high corrosion resistanceof steel,paneluse aluminum alloy mate-rial

电 源 Power

- 宽范围电压输入6-42V ,标准12V输入，带±4000V浪涌保护
- 表现极佳的通过±4KV间隔1min的高压测试，浪涌(冲压)抗扰达到4级。
- Wide range of voltage input 15-36v,formal 24 input, and ±4000 surge protection.
- Excellent performance passed the test of ±4kv an interval 1 min,surge of flexi-bility to grade 4.

使用温度范围 Range of temperature

- 工业级设计，温度范围可达 -40℃-80℃
- Industrial grade design,the range of temperature can reach -40℃ -80℃

通讯接口 communication interface

- 多串口(最多支持3个)
- COM1 RS-232数据传输速度：最大921.6K
- 多通讯方式(RS232、RS485)软件自由切换
- COM2/3 RS-232/RS-485(软件切换)；数据传输速度:最大921.6K
- USB支持功能丰富:U盘数据导入、导出。画面工程更新，USB打印机，键盘、鼠标 、更还可接USB HUB进行扩展。

- 10M/100M self-adapt network
- many COM(max:support 5)
- COM1 RS-232 data transmision speed:max 921.6K
- many communication (RS232, RS485)exchange freely
- COM 2/3RS-232/RS-485(software exchange);data transmission speed, max 921.6K
- USB support numerious function, data input,export on U disk.Update image, USB printer,keyboard,mouse,and link USB to expand.

一 硬件介绍 Hardware introduction

云利科技

硬件特性 Hardware characteristic

运行内核

- 120主频
- Cortex-M3内核
- 支持硬件浮点
- 图形加速功能

存储配置

- 内置 32M DDR
- 256M(可扩展)FLASH
- SD卡扩展存储

running kernel

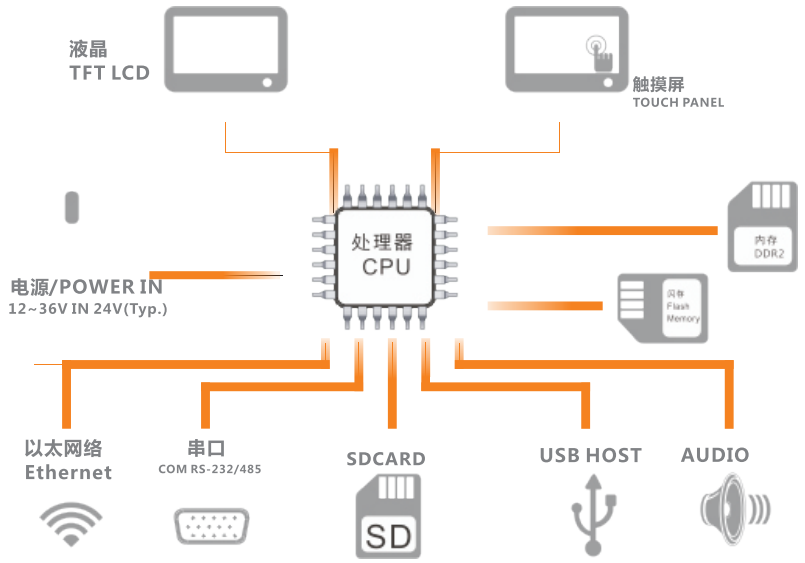
- 120 Mfrequency
- Cortex-M3kernel
- support floating
- 图形加速功能

memoryconfiguration

- 32M DDR memory
- 128M FLASH
- SD expand memory

- 带SD卡存储功能，可以无限制的存储数据记录、 历史记录 、画面数据等，使大型项目的大画面工程不受体积限制。
- SD memory functioncan realize the unlimited store data record,hostiory record,image dta etc and make large projects of the big picture works unrestricted.

产品结构图 product structure



其他功能 Elses

- 支持音频功能，支持视频功能
- 支持西门子MP丨协议及PROF 丨BUS、CAN等现场总线接口和协议
- support audio and vedio
- support SIEMENS MPI agreement and PROFIBUS、CAN site writing port and agreement

软件介绍 Software introduction

云利科技

丰富多彩的色彩显示 richly colorful display

- YL全系列人机界面采用65K色真彩色TFT LCD液晶

Applicate man-machine interface all series of YL,65.536 clear coourful TFT LCD panel

clearer and brighter image

- 全系列宽范围的视角显示
- 特色的宽温液晶面板(可选)
- Full range of wide scope show
- Special widetemperature LCD panel(choose)

丰富的字体和图形 Rich fonts and graphics

- 用户可以自定义各种Windows字体 User can choose different windows script

设定Windows字体时，可以对文字进行斜体、下划线 、放大、 加粗等修饰

When set the windows fonts ,users can modified the text such as italic、underscore、enlarge、bold etc.

Windows 自定义

Windows bold

Windows underscore

Windows italic

Windows enlarge

提供众多的位图与矢量图库包含各种图形与符号

Have more bitmap andvector, includingdifferent graph and symbol

多国语言显示与中文输入 Multi－language display and chinaese

- 人机界面、组态软件中/英文显示实时切换，中文输入，可显示多国语言，产品更国际化.
- Timely cutover between man-machine interface and configuration software displayed in chinese、english. It can display multi-language and makethe productsmore inter-nationalization.

软件介绍 Software introduction

云利科技

强大的变量处理能力 Powerful variable processing capacity

采用变量驱动显示方式，所有的显示和操作都是基于预先设置好的变量配置文件来工作的。系统为2MByte的变量空间，最大支持65536个变量，单页支持最大128个变量，最快的变量刷新频率为80ms，使用GUS来进行开发，可帮助用户快速开发全图形触摸屏人机界面，触摸屏输入法、弹出菜单、滑块拖动、增量调节等触摸屏交互方式和变量图标、艺术字、曲线显示、时间变量等变量显示。

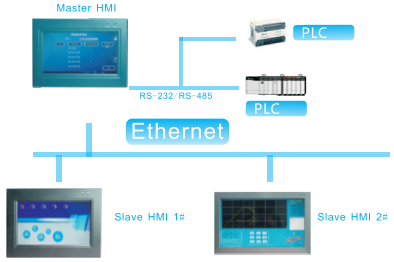
System uses a variable-driven display mode, All of display and operation variables are based on variable configuration profile which is pre-set to work. 2MByte system variable spaces, supports a maximum of 65536 variables, single-page supports a maximum of 128 variables, the fastest refresh rate is 80ms, using the GUS system to develop to help users quickly develop a full graphical HMI with touch screen, touch screen input method, pop-up menu, drag the slider, incremental regulation, interactive touch-screen and variable icons, WordArt, curve display, display variables, such as the time variable, etc.

通讯功能 Communication

分布式网络通讯功能
Distrebuted netcommunication

YL系列人机界面连接到下位设备后，其它的人机界面都可以通过主人机界面来获取设备数据。

The other man-machine interface can access the device data through the master machine after YL man-machine interface connect to the next device.



远程Internet数据交换功能
Remote Internet exchange

YL系列人机界面可以通过INTERNET进行远程的数据更新及程序维护等。

Realize remotedata update an maintain through Internet.

软件介绍 Software introduction

云利科技

软件特色 Features

图片模板设计 Image template design

以图片为整体背景，以控件为控制单元，来进行界面的模板设计；
Based on the overall background of the picture, use the widget as the control unit, for interface template design

变量驱动设计 Variable driven design

每个变量对应到系统的一个寄存器，改变变量的状态或值就是直接改变系统寄存器的值，系统一旦检测到系统寄存器的值发生改变，就立即根据相应的寄存器的功能执行相应的动作或指令；
Each variable corresponding to a register in the system, change the status or data of the variable is directly change the data of the system registers, the system once detect system register data changed,The system will immediately execute the corresponding actions or instructions according to the function of the register

可视化控件设计 Visual control design

在组态软件设计系统中，以面向对象的设计理念，直接用鼠标拖动可视化的控件到设计需要的相应位置，然后在控件的属性页定义相关的属性和动作即可，使设计更形象，更高效；
In configuration software design system, by object-oriented design idea, use the mouse to drag the visual controls directly to the appropriate location for the design, and then definition the related properties and action for control in property page, make a design more image, more efficient;

组态设计 Configuration design

用户能根据自己工程的控制流程和工艺，在组态软件设计系统中,利用软件系统中的控件来自由组合定义，轻松快速实现用户的自动化的控制需求；
Users can according to their own control process and technology , in the configuration software design system, using the control of software system free combination definition, easy and quickly realize the automation of the user control requirements;

配置文件设计 Configuration file design

用户的触控及控件变量的定义，软件系统会自动生成二进制的配置文件，然后可以把这些配置文件下载到Eus控制器中，就可实现用户自定的触控及显示功能；
User's definition for touch and control variables, the software system will automatically generate binary configuration file, then you can download these configuration files to EUS controller, can realize the user set the touch and display function;

自定义键码设计 Customized key code design

在组态软件设计系统中，用户可以自定义触控控件的返回键码，来完成用户的特定功能；
In the configuration software design system, the user can customize the return key code of the touch controls to complete the user's specific functions;

自定义指令设计 Custom instruction design

在组态软件设计系统中，用户可以自定义触控控件的触发指令，来实现同非标准设备间的通信及特定功能；
In the configuration software design system, the user can customize the trigger instruction of touch controls, to realize the communication and specific functions with non-standard equipment;

配置模板导入导出 The import and export of Configuration template

用户可以自由导入原先配置好的系统配置，也可将配置导出到Excel中，方便用户使用；
Users can free to import original configured system configuration, also can export the configuration to Excel, convenient user use;

软件介绍 Software introduction

云利科技

可自由定制的开机画面 Free set start-up screen

- 客户可以方便快捷的定制开机画面，启动时可以显示预先设计的开机LOGO
  (开机画面可以采用定制的BMP格式的图片，让您的产品更绚丽多彩)
- Start-up screen that users can set free and quickly,and show the star-up logo while starting
  The boot-screen can apply the pictures setted by BMP form,make your produts more colourful.

其它功能 Else

触控和变量配置
Touch and variable configuration
提供对触控及变量进行配置，控件可视化的拖动操作、面向对象的配置方式，并将配置保存到配置文件里；
To touch and variable configuration, control the visual drag operation, object-oriented way of configuration, and to save configuration to the configuration file.

图片操作
Pictures operation
在软件设计系统中对图片库进行下载、删除操作，并可以定义图片库的循环显示、局部下载显示等功能；
Download the picture library in software design system, delete, and you can define the picture library to loop, shows partial download display functions

字库和配置文件下载
Fonts and configuration file download
在软件设计系统中对字库和配置文件进行下载和删除管理；
Download and delete management for font library and configuration files in software design system;

自写指令
Since the writing instruction
在软件设计系统中手动写入操作指令接口，只需要输入指令内容，系统自动打包下发到GUS控制器中进行处理;
The software design system is written in the manual operation command interface, only need to enter the instruction content, the system automatically issued to theGUS controller for processing;

终端参数设置
Terminal parameter setting
在软件设计系统中对GUS控制器的通信参数、触控参数、背光参数等进行设置处理；
Proceeding setup processing for communication parameters of the GUS controller, touch parameters, such as the backlight parameter, etc;

总体性能描述 Performance Parameters

云利科技

▪ 显示性能参数 Displaying performance parameter

参数/parameter	数据/data	说明/ Instructions
显示屏类型 / Display Type	TFT	
分辨率 / Resolution	800x600	可以配制成600x800(转90度模式) / Can be made into 600 x800 (turn 90 degrees mode)
颜色 /Color	65K(65536)色	16bit调色板5R6G5B / 16 bit 5 r6g5b palette
显示尺寸 (A.A)/ Display Size (A.A)	162mmX121.5mm	
定位孔尺寸/Location hole Size	193.5mmX142.3mm	
触摸屏类型/Touchscreen type	(电阻) 电容触摸屏/(RTP) CTP	
触摸屏误差/Touch screen error	+/-0.5%	运行中,可以随时重新校准/ Recalibration is run, can at any time
背光类别/ Backlit category	LED	亮度减半寿命不低于30000小时 Brightness in half life of not less than 30000 hours
背光亮度/Backlight Brightness	300nit(Typ)	64级亮度可调触摸屏可以直接控制背光亮度和点亮时间 Adjustable brightness level 64 touch screen can directly control the backlight brightness and light time
Sd接口/ SD Interface	SD/SDHC	FA32文件格式用于图片,字库, 配置文件的下载升级 FA32 file format for images, character, the configuration file download upgrades
RTC 精度 / RTC accuracy	1s/24h	25℃环境温度下/ 25℃ Ambient temperature
其他硬件 /Other hardware	蜂鸣器/Buzzer	可以软件控制铭叫点击有效触摸按键会自动伴音提示 Click software control inscription called the effective touch button will automatically sound prompt

总体性能描述 Performance Parameters

云利科技

▪ 电气性能参数 Electric performance parameters

参数/parameter	测试条件/Test condition	最小值/MIN	典型值/Typical value	最大值/MAX	单位/Unit
工作电压 Operating Voltage	S5Von	3.3	5	6	V
	S5Voff	6	12	42	V
工作电流 working current	Vcc=12V,背光开启 Vcc=12V,Backlit open	-	270	-	mA
	Vcc=12V,背光关闭 Vcc=12V,light-off	-	170	-	mA

▪ 工作环境和可靠性参数 The work environment and the reliability parameters

参数/parameter	测试条件/Test condition	最小值/MIN	典型值/Typical value	最大值/MAX	单位/Unit
工作温度 Operating temperature	Vcc=12V,湿度60%	-20	25	70	℃
存储温度 Storage Temperature	-	-30	25	80	℃
工作湿度 Operating humidity	Ta=25℃	10%	60%	90%	RH
三防处理 Three processing	-	-	有	-	-
老化时间 Ageing time	25°C	-	48	-	H
ESD防护等级 ESD protection grade	IEC4级(接触和空气放电)				
防护等级 Protection grade	IP65(正面)				
其他认证 Other authentication	CE, ROHS				

总体性能描述 Performance Parameters

用户接口特性 User interface features

参数/parameter	规格/Specification
工作电压 / Operating Voltage	DC6~42V, 带电源反接保护 DC6~42V,with the power supply reverse interface power supply
功耗 / power dissipation	3.24W(12V, 270mA)
串口模式 / Serial mode	N81
串口电平 / Serial port level	RS485和RS232/TTL UART**客户可任意选择其中一种**
用户连接端子 / User terminals	6pin_3.18mm 接线端子

软件功能 Software function

参数/parameter	规格/Specification
软件平台 / Software platform	KGUS系统软件 / KGUS system software
硬件寄存器空间/ Hardware register space	256 Bytes
用户变量存储空间 / User variable storage space	56K Bytes
字库和图表库存储空间/ Character and graph library storage space	32M Bytes
图片存储空间 / Image storage space	180M 可以保存242幅全屏图片(可扩展) 180 m can save 242 full screen image

总体性能描述 Performance Parameters

云利科技

安装特性 The installation features

参数/parameter	规格 / Specification
外壳材料 Shell material	ABS 工程材料（或者铝合金材料） ABS engineering materia
外壳颜色 Shell color	黑色 Black
外壳尺寸 Shell Size	204.5（mm）× 148.8（mm）× 17.5 （mm） 204.5（mm）× 148.8（mm）× 17.5 （mm）
安装开孔尺寸 Installation hole size	193.5(mm)× 142.5 (mm) 193.5(mm)× 142.5 (mm)
安装深度 Fitting Depth	9.4（mm）（连接接插件的最大深度） 9.4（mm）(maximum depth of connection connectors)
净重 Net Weight	450g 450g
配件 Accessories	防水橡胶垫圈、卡扣 Waterproof rubber washer, card buckle

外接口说明 External interface specifications

云利科技

J1引脚／Pin	引脚名称／The name of the pin	引脚类型 ／ Pin Type	功能描叙 ／ Function
1	GND	P	电源地 ／ power ground
2	485+/CANH	A	串口数据(RS485)/(RS485) serial port data
3	485-/CANL	B	串口数据(RS485)/(RS485) serial port data
4	TXD/CANH	I	串口输出(CMOS/RS232) /Serial output (CMOS/RS232)
5	RXD/CANL	O	串口输入(CMOS/RS232)/Serial output (CMOS/RS232)
6	VIN	P	电源输入 (+12V)/(+12V)Input power

J2引脚／Pin	引脚名称／The name of the pin	引脚类型 ／ Pin Type	功能描叙 ／ Function
1,2	GND	P	电源地 ／ power ground
3,4	DIN	I	串口输入(CMOS/TTL) /Serial input (CMOS/TTL)
5	DOUT		串口输出(CMOS/TTL) /Serial output (CMOS/TTL)
6	BUSY	O	串口缓存区忙信号指示(CMOS/TTL) /(CMOS/TTL)Serial buffer busy indicator
7,8	VIN	P	电源输入 (+12V)/(+12V)Input power

外接口说明 External interface specifications

云利科技

J16引脚/ Pin	引脚名称/ The name of the pin	引脚类型 / Pin Type	功能描叙 / Function
1	VIN	P	电源输入 (+12V)/(+12V)Input power
2	VIN	P	电源输入 (+12V)/(+12V)Input power
3	GND	P	电源地 / power ground
4	GND	P	电源地 / power ground
5	CVBS1	I	第一路视频输入
6	CVBS2	I	第二路视频输入

软件功能说明 Software architecture description

云利科技

▪ 通讯数据帧架构 Communication data frame structure

KGUS屏的串口数据帧由 4 个数据块组成，如下表所述：
KGUS screen serial port data frame is composed of four data blocks, described in the following table:

数据块 Data Block	1	2	3	4	5
定义 Definition	帧 头 Frame header	数据长度 Data length	指令 order	数据 Data	指令和数据的 CRC 校验 CRC check instructions and data
数据长度 Data length	2	1	1	N	2
说明 Introductions	CONFIG.TXT 配置文件的 R3:RA 定义 CONFIG. TXT CONFIG file of R3: RA definition	数据长度包括 指令、数据和校验 Data length including instructions, data, and checking	0x80-0x84		CONFIG.TXT 配置文件的R2 决定是否启用 The CONFIG. TXT R2 to determine whether to enable configuration file

一个数据包能够传送的□大数据长度为 254 字节(不要 CRC 校验)或 252 字节(带 CRC 校验).CRC 校验不包括帧头和数据长度,仅针对指令和数据,采用 ANSI CRC-16(X16+X15+X2+1）格式.

Are capable of transmitting a packet large data length of 254 bytes (don't) CRC check or 252 bytes (with CRC check). The CRC check does not include the frame head and data length, only for instructions and data, using the ANSI CRC - 16 X16 (+ X15 + X2 + 1) format.

软件功能说明 Software Function Specification

云利科技

▪ 指令集 Bit

功能/Function	指令/Instruction	数据/ Data	说明/ Instructions
访问控制寄存器	0x80	ADR(0x00-0xFF)+Data_Pack	指定地址写寄存器数据 The specified address register data
	0x81	ADR(0x00-0xFF)+RD_LEN(0x00-0xFF)	指定地址读 RD_LEN 字节寄存器数据 读寄存器的屏应答 The specified address byte read RD_LEN register data Read the register screen response
		ADR(0x00-0xFF)+RD_LEN+Data_Pack	
访问数据存储器	0x82	ADR_H:L(0x0000-0x6FFF)+DATA0…DATAn	指定地址开始写入数据串(字数据)到变量存储区 Specified address began to write data (data) to the variable storage area
	0x83	ADR_H:L(0x0000-0x6FFF)+RD_LEN(0x00-0x7F)	从变量存储区指定地址开始读入 RD_LEN 长度字数据 读数据存储器的 EUS 屏应答 Starting from the variable storage area specified address read RD_LEN word length data Read data memory EUS screen response
		ADR_H:L+RD_LEN+DATA0……DATAn	
写曲线缓冲区	0x84	CH_Mode(Byte)+DATA0(Word)+…+DATAn	写曲线缓冲区数据。 CH_Mode 定义了后续数据的通道排列顺序： CH_Mode 的每个位（bit）对应 1 个通道； CH_Mode.0 对应 0 通道，.7 对应 7 通道； 位置 1 表示对应的通道数据存在；数据按照低通道数据在前排列。 比如 CH_Mode=0x83（10000011B），表示后续数据格式 为： （通道 0+通道 1+通道 7）+…+（通道 0+通道 1+通道 7）。 Write buffer curve data. CH_Mode defines the channel of the subsequent data sequence CH_Mode each bit (bit) corres ponds to a channel;CH_Mode. 0 0 channel. 7 corresponding 7 channels:Position 1 said the corresponding channel data: data according to the low channel data in the previous arrangement.

软件功能说明 Software Function Specification

云利科技

▪ 触控配置文件 Touch the configuration file

触控配置文件由N条按照页面配置的触控指令组成，每条触控指令固定占用16、32、48或者64字节存储空间。一条触控指令由以下6部分组成:
Touch the configuration file by article N of a touch instructions according to the configuration page, each touch instruction fixed 16, 32, 48 or 64 bytes of storage space.A touch instruction consists of the following six parts:

序号 The serial number	定义 Define	数据长度 The length of the data	说明 Instructions
1	Pic_ID	2	页面ID
2	TP_Area	8	触控按钮区域：左上角坐标（Xs,Ys），右下角坐标（Xe,Ye）当Xs=0xFFFF时，表示触发控制由0x4F寄存器的键码值触发，此时Ys_H为设定的触发键码值（Ys_L,Xe,Ye值未定义，可任意写）；由键码值触发时，请把按钮按压效 果设置为无效。 Touch button areas: upper left coordinates (Xs and Ys), the lower right corner coordinates (Xe, Ye) when Xs = 0 XFFFF said trigger control triggered by key code value of 0 x4f registers, the Ys_H trigger key code for the set value (Ys_L, Xe, Ye value undefined, can be arbitrary write);When triggered by key code values, please put the button presses effect is set to null and void.
3	Pic_Next	2	目标切换页面,0xFF**表示不进行页面切换. Switch target page, 0 XFF * * says not to switch from the page.
4	Pic_On	2	按钮按压效果图所处的页面，0xFF**表示没有按钮按压效果 Button press the rendering of the page, * * said there was no button press 0 XFF effect
5	TP_Code	2	控键码: 0xFF**表示无效的键码 0xFE**（或者0xFD**）表示触控功能按键，比如0xFE00表示启动变量数据触摸屏 录入。0xFE**的功能按键可以由R2.3设置成变量改变后是否自动上传，0xFD**的 功能按键始终禁止变量改变后自动上传。0x00**表示触控键码，用ASCII表示；比如0x0031表示按键"1"。 Control key code: 0 XFF * * said invalid key code * * * * (or 0 0 xfe XFD) said touch function keys, such as 0 xfe00 said to start the touch screen input variable data.0 xfe * * function keys can be set by the R2.3 into whether the variable change after uploading, 0 XFD function keys always prohibited * * variables change automatically after upload. 0 x00 * * said touch key code, use ASCII representation;S
6	TP_FUN	32	当TP_Code=0xFE**时，用来对触控功能按键进行描述。 When TP_Code = 0 xfe * *, to touch the key is described.

云利科技

▪ 显示变量配置文件 Show variable configuration file

显示变量配置文件由N条按照页面配置的变量指令组成，每条变量指令固定占用32字节存储空间。 每个页面固定分配2KB或4KB（0x0800或0x1000）变量存储空间，每个页面最多可以设置64或128个变量。 显示变量配置文件最大2MB，可以配置最多1024个页面。相同类型的变量，存储位置越靠后，显示优先级越高。 一条显示变量配置指令由以下6部分组成：Show variable configuration file consisting of N article according to the configuration page variable instruction, each variable instruction fixed 32 bytes of storage space.Each page fixed allocation 2 KB or 4 KB (0 x0800 or 0 x1000) variable storage space, and each page can set a maximum of 64 or 128 variables.Show variable configuration file maximum 2 MB, you can configure up to 1024 pages.The same type of variable, the more storage location, shows that the higher the priority.A display variable configuration instruction consists of the following six parts:

序号 The serial number	定义 Define	数据长度 The length of the data	说明 Instructions
1	0x5A	1	固定/ Fixed
2	Type	1	变量类别 / Variable categories
3	*SP	2	变量描述文件从Flash加载后存储到数据存储区的地址指针，0xFFFF表示不转存到 数据存储区. Variable description file from Flash after loading the address pointer of stored in the data storage area,0 XFFFF said not archived to the data store.
4	Len_Dsc	2	变量描述内容的字长度 / Variables describing the word length of the content
5	*VP	2	变量地址，0x0000-0x6FFF，有些无需指定地址的变量，写0x0000即可。 当变量地址高字节为0xFF时，本条指令将被取消。 Address to variables. 0 x0000 x6fff 0, some don't need to specify the address variable, Write 0 x0000 can.When high variable address byte 0 XFF, this order will be cancelled.
6	Description	N	当变量描述内容 / When the variables describing the content

软件功能说明 Software Function Specification

- **变量类型说明** Variable types that

类型/Type	功能/Function	备注说明/Descr
0x00	变量图标显示/Variable icon is displayed	图标变量 Icon variable
0x01	动画图标显示/Animation icon is displayed	
0x02	滑块刻度指示/The slider calibration instructions	
0x03	艺术字变量显示 / Variable display art word	
0x04	图片动画显示 / Animated picture	
0x05	图标旋转指示 / Icon turn indicator	
0x06	位变量图标显示 / A variable icon is displayed	
0x10	数据变量显示/Variable data display	文本变量 Text variables
0x11	文本显示 / Text display	
0x12	RTC显示 / RTC shows	
0x13	时间变量显示 / Show time variable	
0x20	实时曲线显示 / Real time curve display	图形变量 Graphic variables
0x21	基本图形显示 / Basic graphics display	
0x22	列表显示 / The list shows	
0x23	进度条显示 / The progress bar shows	

软件功能说明 Software Function Specification

云利科技

▪ SD卡配置接口 SD card configuration interface

文件类型/The file type	命名规则/Naming rules	举例/For example	说明/Instructions
图片文件 Image files	图片存储位置+(可选的)文件名. BMP Image storage location + file name (optional). BMP	00开机界面. BMP 00 boot interface. BMP	必须是和 KGUS屏分辨率相同的16位色 BMP 文件。 Must be 16 and KGUS screen resolution is same color BMP file.
字库文件 Font file	字库存储位置+(可选的)文件名. BIN/HZK/DZK Word stock storage location + file name (optional). BIN/HZK/DZK	63_GBK12 汉字库. DZK 63 _gbk12. Chinese character DZK	可以由 TS3 字库提取软件生成 Can be extracted by the TS3 word stock software generated
图标库 Icon library	字库存储位置+(可选的)文件名. ICO Word stock storage location + file name (optional). ICO	41 图标库. ICO 41 icon library. ICO	工具箱“ICON”生成 Toolbox "ICON" generated
专用字库 The special character	00*. HZK	00_ASC. HZK	工具箱“0 号字库”生成 Toolbox "0 word stock" generated
输入法词库 Input method thesaurus	12*.BIN	12_PY_EUS.BIN	预装 pre-installed
变量初始化 The variable initialization	22*. BIN	22 变量初始化. BIN 22 variable initialization. BIN	
触控配置 Touch the configuration	13*.BIN	13 触控配置文件. BIN 13 touch the configuration file. BIN	KGUS 组态软件生成 KGUS Configuration software is generated
变量配置 Variable configuration	14*. BIN	14 变量配置文件.BIN 14 variable configuration file. BIN	KGUS 组态软件生成 KGUS Configuration software is generated
硬件设置 The hardware configuration	CONFIG. TXT	CONFIG. TXT	

软件功能说明 Software Function Specification

云利科技

▪ CONFIG.TXT配置文件说明 The CONFIG.TXT CONFIG file

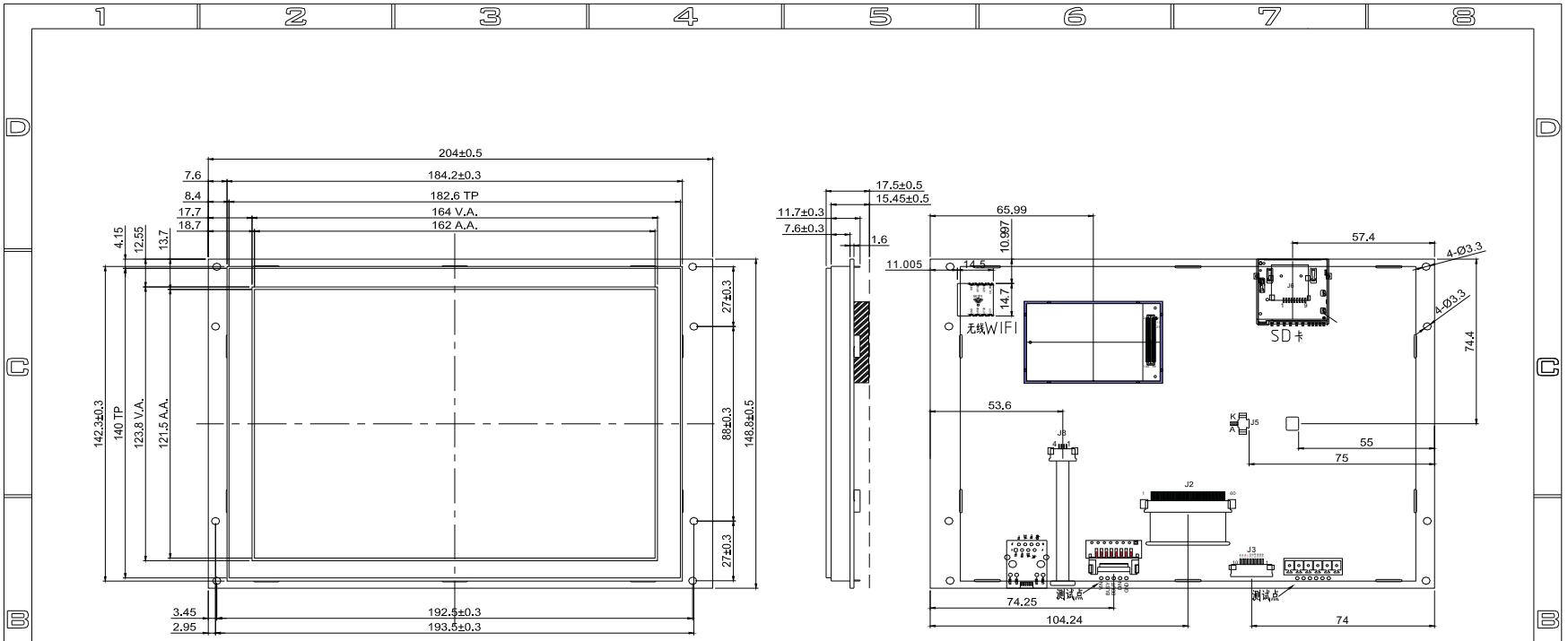
参数寄存器名称 Parameter name register	取值范围 Value range	说明 Instructions
R0	取决于KGUS屏/ Depending on the KGUS screen	KGUS屏驱动模式选择,配置错误会导致显示异常,用户不要配置. KGUS screen drive mode selection, configuration errors can lead to display abnormal, users don't configuration.
R1	0x00-0x11	波特率设置，0x00-0x10 对应 1200bps－921600bps R1 0x00 0x01 0x02 0x03 0x04 0x05 0x06 0x07 0x08波特率 1.2K 2.4K 4.8K 9.6K 19.2K 38.4K 57.6K 115.2K 28.8K R1 0x09 0x0A 0x0B 0x0C 0x0D 0x0E 0x0F 0x10 0x11 波特率 76.8K 62.5K 125K 250K 230.4K 345.6K 691.2K 921.6K 自定义 Baud rate Settings, 0 x00-0 x10 corresponds to 1200 BPS to 921600 BPS R1 0 x00 0 x01 0 x02 0 x03 x04 x07 x06 x05 0 0 0 0 0 x08 Baud rate 1.2 K, 2.4 K, 4.8 K, 9.6 K, 19.2 K, 38.4 K, 57.6 K, 115.2 K to 28.8 K R1 x09 0 0 x0a x0b x0e x0d x0c 0 0 0 0 0 x0f to 0 x10 0 x11 Baud rate 76.8 K, 62.5 K, 125 K, 250 K, 230.4 K, 345.6 K, 691.2 K, 921.6 K custom
R2	0x00-0xFF	SYS_CFG 配置字，按位（bit）定义，说明如后。 SYS_CFG configuration characters, bitwise (bit) is defined, such as after.
R3	0x00-0xFF	UART_SYNC_H 串口帧头高字节 UART_SYNC_H frame head high byte serial port
R4	取决于KGUS屏/ Depending on the KGUS screen	KGUS屏驱动模式选择,配置错误会导致显示异常,用户不要配置. KGUS screen drive mode selection, configuration errors can lead to display abnormal, users don't configuration.
R5	不定/ Indefinite	当 R1=0x11 时,波特率配置字的高字节.R5:R9=6250000/用户自定义波特率.比如设定10000bps波特率, R5:R9=6250000/10000=625=0x0271 R5=02 R9=71 When R1 = 0 x11, the high byte of baud rate configuration word.R5: R9 = 6250000 / users to customize the baud rate.Set 10000 BPS baud rate, for example, R5: R9 = 6250000/10000 = 625 = 0 x0271 R5 = 02 R9 = 71
R6	0x00-0x40	触摸屏控制背光启动后，点击触摸屏后背光点亮亮度 The touch screen control backlit, click touch screen backlight after light brightness
R7	0x00-0x40	触摸屏控制背光启动后，一段时间不点击触摸屏，背光关闭的亮度 Touch screen control backlit starts, for a period of time don't click on the touch screen, the brightness of the backlight close
R8	0x01-0xFF	触摸屏控制背光启动后，触摸屏背光点亮时间，单位为 1.0 秒 Touch screen backlight control, touch screen backlight light time, unit for 1.0 seconds
R9	不定 / Indefinite	UART_SYNC_L 串口帧头低字节 UART_SYNC_L frame head low byte serial port
RA	0x00-0xFF	按位（bit）定义，说明如后。 By bit (bit) definition, such as after.
RB	不定 / Indefinite	当 R1=0x11 时，波特率配置字的低字节。 When R1 = 0 x11, baud rate configuration words low byte.

配置文件的参数均为一字节的 HEX 模式(必须大写)，比如 0A 表示 10 进制的 10； 配置文件的参数必须为 2 位，比如 00 不得写成 0。
Profile parameters for a byte HEX mode (must be capitalized), such as 0 a decimal 10;The parameters of the configuration file must be two, such as 00 shall not be written as zero.

云利科技

RB	位说明/A description
. 7	0= 点击触摸屏后，松开触摸屏时，自动上传0x72指令，触控模式下必须设置为0。 1= 点击触摸屏后，离开触摸屏时，不上传0x72指令。 0 = after click on the touch screen, loosen the touch screen, automatic upload 0 x72 instructions, touch mode must be set to 0. 1 = after click on the touch screen, leaving the touch screen, do not upload 0 x72 instructions.
. 6	坐标回传模式下： 0= 点击触摸屏后，会以100ms的间隔定时自动上传0x73指令，直到触摸屏松开。 1= 点击触摸屏后，只会在按下时自动上传1次0x73指令。 触控模式下，并且Para1. 0=1： 0= 点击触摸屏后，会以100ms的间隔定时自动上传0x79指令，直到触摸屏松开。 1= 点击触摸屏后，只会在按下时自动上传1次0x79指令。 Coordinates back mode: 0 = after click on the touch screen, with 100 ms interval timing automatically upload 0 x73 instructions, until the touch screen to loosen. 1 = after click on the touch screen, it will only upload automatically when press the 1 0 x73 instructions. Touch mode and Para1.0 = 1: 0 = after click on the touch screen, with 100 ms interval timing automatically upload 0 x79 instructions, until the touch screen to loosen. 1 = after click on the touch screen, it will only upload automatically when press the 1 0 x79 instructions.
. 5	0= 点击触摸屏后，HMI不进行触控界面的切换。 1= 点击触摸屏后，HMI自动按照0x1E配置文件的要求进行触控界面的切换。 0 = after click on the touch screen, HMI touch interface switching. 1 = after click on the touch screen, HMI automatically according to the requirements of 0 x1e configuration file to switch from the touch interface.
. 4	0= 背光不受触摸屏或键盘控制 1= 背光由触摸屏或键盘控制，同时用户也可以通过0x5E/0x5F指令强制开关 0 = backlight is not controlled by the touch screen or keyboard 1 = backlit by the touch screen or keyboard control, at the same time, the user can also forced switch by 0 x5e / 0 x5f instructions.
. 3	0= 触摸屏或按键有蜂鸣器伴音。1= 触摸屏或按键无蜂鸣器伴音。 0 = touch screen or buttons have buzzer sound.1 = no buzzer sound touch screen or buttons.
. 2	0= 0° 显示。 1= 偏转90° 显示。 0 = 0 ° display.1 = 90 ° deflection display.
. 1	0= 触控模式下，蜂鸣器伴音一直开启。 1= 触控模式下，蜂鸣器只有在点击有效位置时鸣叫一次 0 = touch mode, the buzzer sound has been open. 1 = touch mode, the buzzer only sing once when clicking the effective position
. 0	触控模式下：0= 不上传0x79指令 1= 上传0x79指令 Touch mode: 0 = do not upload 0 x79 instructions upload 1 = 0 x79

外形尺寸 Overall dimensions



	A	B
1	J1:8PIN,P2.54mm	
2	PIN	SYMBLE
3	1	GND
4	2	GND
5	3	DIN
6	4	DIN
7	5	DOUT
8	6	BUSY
9	7	VIN
10	8	VIN

J3:10PIN,P1mm	
PIN	SYMBLE
1	GND
2	GND
3	GND
4	BUSY
5	TXD
6	RXD
7	NC
8	VIN
9	VIN
10	VIN

	A	B
1	J4:6PIN,P3.81mm	
2	PIN	SYMBLE
3	1	GND
4	2	485-
5	3	485+
6	4	TXD
7	5	RXD
8	6	VIN

	A	B
1	J8:4PIN,P1.0mm	
2	PIN	SYMBLE
3	1	X+
4	2	Y-
5	3	X-
6	4	Y+

NOTES:
1.Display type:8.0"TFT
2.Viewing direction:6 O'CLOCK
3.Operation temperature:-20℃~+70℃
4.Storage temperature:-30℃~+80℃
5.Operating Voltage:6.0~42V,12V(TYP)
6.Tolerance is V1.3 unless otherwise noted

REVISION RECORD		DATE						
A	FIRST ISSUE							
B								
C								
D								
E								
F								

SHENZHEN YL TECHNOLOGY CO.LTD.					
E-mail:swtintel@163.com					
TITLE:	HMI OUTLINE DIMENSION			GEN.TOL.	
Model NO.	YL-HMI080T8060KRK-04			PRO.(3):	
Part NO.	SPEC-YL-HMI080T8060KRK-04			VER.:	A
DRAWN	JLS	DATE	2015.06.16	SHEET:	1
CHECKED		DATE		UNIT:	mm
APPROVED		DATE		SCALE:	1:1