

WinGuard

Test and development environment

Features

- Universal test software
- Easy to use
- Extensive script language
- SQL database
- Statistics tool

WinGuard is a Windows-based software used to generate and perform test sequences to test electronic PCBs or devices. Test scripts can easily be created by filling in dialogs. The intuitive interface makes programming easy to learn and does not require any specific programming knowledge. The preferred hardware for WinGuard is our Guardian Test System, but any measuring device and source can also be integrated via various hardware and software interfaces.

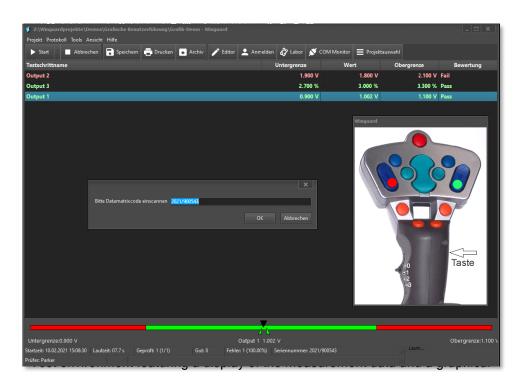
The readings are compared to the upper and lower limit values then displayed in a table on the screen and stored in an SQL database. Handy tools such as the integrated debugger and laboratory panel for manual hardware control assist test technicians during commissioning and troubleshooting. • Sequence control for PCB and EOL tests

Application

- Self-learning connection and short-circuit tests
- Component tests (in-circuit tests)
- Firmware programming
- Parameterising and calibration
- Automation of manual tests

PC requirements

Operating system	Windows 10 PRO 64 Bit
Processor	Intel I5 Quad Core or quicker
RAM	8 GB
Harddrive	512 GB SSD
Graphic resolution	1920 × 1080 pixels
Interfaces	RS-232 COM port (no USB serial converter) USB 2.0/3.0 display (VGA/HDMI/DVI/DP) ethernet



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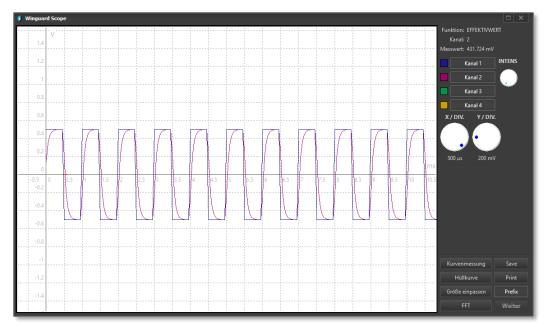
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Please read the software guide to learn more.

https://gts-online.net/winguard-docs/

Z:\Winguardprojekte\FDX_FOL\STI_FOL_Test - Winguard												
Projekt Bearbeiten Ausführen Optionen Tools Ansicht Hilfe												
			l⊣∎⇔९XŮ⊡∽४₡४0									
		INITIALIZ	ATION FINALIZATION Main-Unit Globale Projektvariablen Funktionen									
Maswertung	4 // 43466 sind die Anzahl der Tage vom 30. Dezember 1899 - 1. Januar 2019											
🖬 Bilder 🗑 Eingabe												
Hardware			result := (UAII: IME - 43400) div 1) - 1 end procedure:									
8-fach DA-Wandler			ena procedure;									
Adapter Startkontakt												
ADX-Karte			<pre>procedure Wochentag(var result : Real),dc : Real;</pre>	Unterprogramm definieren								
BUS-Befehle			// Arbeitstag: 1 (MO) bis 7 (SO)	Identifikation								
Comport: Eigenschaften			Datecode(dc);	Name der Routine: Print_L	abel							
Comport: Lesen Comport: Schreiben			result:= (dc + 2) mod 7	Name der Unit: Funktio	onen							
Farb-Messung			end procedure;									
GPIB				Zeile: 15								
Hardware initialisieren				Parameter								
Kapazität-Messung			<pre>procedure Print_Label(typ : String; snr : String),data : array of String, z :</pre>		Datentyp	Übergabetyp						
Kurzschlusstest Lastrelais-Karte		16	Datecode(messwert);	typ	String	Übergabe als Wert						
Motor-Steuerung		17	Wochentag(messwert);		String	Übergabe als Wert						
MSU-Karte		18	wochencag(messwerc);	snr	string	Obergabe als wert						
PIO-Karte												
PLD-Karte			<pre>datei:= PROJEKTPFAD + typ + ".zpl"</pre>									
PSU U/I-Messung			SysUtils(Command:"FileExist", FileName:datei, Result:ok);									
PSU-Karte Relaismatrix			if ok = 0 then									
Sinusgenerator			MeldungsBox(XPos:0, Type:mtError, YPos:0, Text:"Konnte Datei " + date									
UMB-GPIO			end if									
UMB-I2C			// Comport mit 115200 Baud öffnen	Lokale Variablen	ên							
UMB-Karte			ComOpen(Port:PrinterComport - 1, Baud:12, Open:True);	Name Datentyp								
UMB-Scope UMB-SPI				data array of Stri								
WFG-Karte			<pre>data:= readfile(datei)</pre>	z		Real						
Widerstandsgeber			for z:= 1 to length(data) do	ok		Real						
Programmablauf			<pre>if strpos(data{z}, "#SNR") > 0 then</pre>			String						
case of		30	<pre>// StrReplace(HayStack : String; Needle : String; Replace : String</pre>	,								
goto Halt		31	<pre>data{z}:= StrReplace(data{z}, "#SNR", snr);</pre>									
if then else		32	end if;	bytes		Real						
Label		33	// Daten über Comport zum Drucker senden (Zebra ZT22)									
Schleifen												
Sequentieller Dateizugriff		34	<pre>ComWrite(Port:PrinterComport = 1, Out:data{z}, QTimer:1);</pre>		<u>O</u> K	Abbrechen	Hilfe					
III Sonstiges III Umgebung			bytes:= bytes + length(data{z})									
Unterprogramme			StatusText(Text:"Zeile " + z + " " + bytes + " Bytes gesendet");									
Variablen			InfoBox(Text:Bytes + " Bytes über COM" + PrinterComport + " gesendet", Close:0, NoBorder:-1);									
ArrayToString			end for									
Neu Deklarieren			Pause(Time:500, Visible: False);									
Stringbearbeitung StringToArray			<pre>ComOpen(Port:PrinterComport - 1, Baud:9600, Open:False);</pre>				-					
Skillig TOArray			· · · · · · · · · · · · · · · · · · ·									

Script editor with command browser and debugger



Scope with extensive evaluation features

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PSU 1 PSU 2 REL 1 REL 2 ADX MSU PIO O 5.015 V 01 1 01 0 02 0 02 0 02 0 02 0 0.02 mV Channel (+) 1 0								×
Image: Second system Image: Second system <td< th=""><th>-</th><th>PSU 1</th><th>PSU 2</th><th>REL 1</th><th>REL 2</th><th>ADX</th><th>MSU</th><th>PIO 🕐</th></td<>	-	PSU 1	PSU 2	REL 1	REL 2	ADX	MSU	PIO 🕐
	LABO	5.015 V -0.001 A	V A V 000.00	01 1 1 02 0 1 03 1 1 04 1 1 05 0 1 06 0 1 07 0 1 08 0 1 09 0 1	01 0 11 02 0 11 03 0 11 04 0 11 05 0 11 06 0 11 07 1 1 08 1 1 09 0 11	~ 0.02 mV Time: 100 ms V V~ Ω ++ T+ T- 100 20 20	Channel (+) 1 + - 1 Channel (-)	Tristate Low High 0 • 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • 10 • 11 • 12 • 13 • 14 •

Virtual laboratory with manual control of the test system

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