Sefram

Make sure to visit our Website
http://www.sefram.fr

SEFRAM 6152, 6154
6252, 6254, 6352, 6354

350MHz/250MHz/150MHz
Digital storage oscilloscope

2 channels or 4 channels

Features:

- 350/250/150MHz Bandwidth,
- Dual Sampling Modes: 5GSa/s Real-Time
- Sampling Rate and 100GSa/s Equivalent Time Sampling Rate
- 25k points Memory for each input channel
- VPO (Visual Persistence Oscilloscope) Technology to
- Display Less-Frequently- Appeared Signals
- 8" 800 x 600 High Resolution TFT LCD Display
- Unique Split Screen System with Independent Setting for Each Signal Channel
- Three Input Impedance Selection: 50 /75 /1Mohms
- Optional Power Measurement Software for Power Supply
- Measurement and Analysis
- Optional Serial BUS Triggering, Decoding Software Supporting I2C, SPI and UART

The new SEFRAM 6000 digital storage oscilloscope is a full-featured and powerful tool that allows you to tackle complex measurement issues with ease. The new 6000 Series, carrying a maximum bandwidth of 350MHz, is equipped with a real-time sampling rate up to 5GSa/s and an equivalent-time sampling rate of 100GSa/s. The large 8-inch SVGA TFT LCD screen, combined with the advanced digital signal processing technology VPO, provides meticulous detail and clarity for the displayed waveforms. The new 6000 Series gives you confidence not to miss any part of the test signal in the product verification and debugging stages and allows you to speed up your task without hesitation.

Rich features

With widespread applications of embedded system using serial bus communications, resolving unexpected issues, such as propagation delay and bus contention, is often a challenge to design and testing engineers. The new 6000 Series provides (optional) design and testing engineers with powerful tools for the communication analysis and debugging of the most popular serial interface projects including I C ,SPI and UART. To fulfill the increasing power measurement demands, as a green energy trend, the new family provides an embedded power-measurement software (optional), which includes measurements of Power Quality, Harmonics, Ripple and Inrush Current, meeting requirements of most power measurement standards.

Convenient plateform

With 5GSa/s sampling and Visual Persistence Oscilloscope (VPO) technology, the new family displays waveforms truthfully and captures less-frequently-appeared signals, like glitches or runts, simultaneously without missing any spot of waveform information. A unique Split-screen feature allows each input channel to be operated independently with respective setting and waveform display. This gives users flexibility to use the new 6000 Series as a multi-scope-in-one DSO. To alleviate the burden of manual operation and to reduce human error, additional features such as auto range are used to automatically adjust the horizontal and vertical scale of a displayed signal so that waveforms are displayed with the best possible viewing ratio. The I/O Interfaces give you a good range of choices and convenience. In the front panel, a USB host port is used for easy data access. And in the rear panel, another USB port can be used for remote control or for screen printout directly from PictBridge compatible printers. In addition, RS-232 and LAN interfaces provide the flexibility supporting broad range of applications. The SVGA video output port allows you to display the screen on an external projector or monitor for information sharing and discussion.

Unique signal processing

With widespread applications of embedded system using serial bus communications, resolving unexpected issues, such as propagation delay and bus contention, is often a challenge to design and testing engineers. The new 6000 Series provides (optional) design and testing engineers with powerful tools for the communication analysis and debugging of the most popular serial interface projects including I C ,SPI and UART. To fulfill the increasing power measurement demands, as a green energy trend, the new family provides an embedded power-measurement software (optional), which includes measurements of Power Quality, Harmonics, Ripple and Inrush Current, meeting requirements of most power measurement standards.

CE

Sefram
INSTRUMENTS & SYSTEMES

Sefram

SEFRAM 6152, 6154, 6252, 6254, 6352, 6354

Caractéristiques techniques — SEFRAM 6152, 6154, 6252, 6254, 6352, 6354

	GDS-3152	GDS-3154	GDS-3252	GDS-3254	GDS-3352	GDS-3354
Channels	2Ch+EXT	4Ch+EXT	2Ch+EXT	4Ch+EXT	2Ch+EXT	4Ch+EXT
VERTICAL						
Bandwidth	DC~150MHz(-3dB)	DC~150MHz(-3dB)	DC~250MHz(-3dB)	DC~250MHz(-3dB)	DC~350MHz(-3dB)	DC~350MHz(-3dB)
Rise Time	2.3ns	2.3ns	1.4ns	1.4ns	1ns	1ns
Vertical Resolution	8 bits					
Vertical Resolution (1MΩ)	2mV~5V/div					
Vertical Resolution (50/75Ω)	2mV~1V/div					
Input Coupling	1M Ω // 16pF					
DC Gain Accuracy	(3% X IReadoutI + 0.1div + 1mV)					
Polarity	Normal , Invert					
Maximum Input Voltage (1MΩ)	300V (DC+AC Peak), CATI					
Maximum Input Voltage(50/75Ω)	5 Vrms max, CATI					
Offset Position Range	2mV/div ~ 100mV/div : ±0.5V ; 200mV/div ~ 5V/div : ±25V					
Bandwidth Limit	20MHz/100MHz/200MHz (-3dB)					
Waveform Signal Process	Add, subtract, multiply, and divide waveforms, FFT, FFTrms ; FFT: Spectral magnitude. Set FFTVertical Scale toLinear RMS or dBV RMS, and FFTWindow to Rectangular, Hamming, Hanning, or Blackman-Harris.					
TRIGGER						
Source	CH1, CH2, Line , EXT Auto (supports Roll Mode for 100 ms/div and slower), Normal, Single					
Trigger Mode	Edge, Pulse Width, Video, Runt, Rise & Fall, Alternate,					
Trigger Type	Event-Delay(1~65,535 events), Time-Delay(10ns~10s)(for 4-channel models only), I C, SPI, UART(optional)					
Trigger Holdoff Range	10ns ~ 10s					
Coupling	AC, DC, LF rej. , Hf rej. , Noise rej.					
Sensitivity	DC~30MHz Approx. 0.5div or 5mV;30MHz~150MHz Approx. 1.5div or 15mV;150MHz~350MHz Approx. 2div or 20mV					
EXT TRIGGER						
Range	±15V					
Sensitivity	DC ~ 30MHz Approx. 50mV;30MHz ~ 150MHz Approx. 100mV 150MHz ~ 250MHz Approx. 150mV;250MHz ~ 350MHz Approx. 150mV					
Input Impedance	1MΩ ±3%, ~16pF					
Range	1ns/div ~ 50s/div (1-2-5 increments); ROLL: 100ms/div ~ 100s/div					
Pre-trigger	10 div maximum					
Post-trigger	1,000 div					
Accuracy	±20 ppm over any ≥1 ms time interval					
X-Y MODE						
X-Axis Input/Y-Axis Input	Channel 1; Channel 3/Channel 2; Channel 4					
Phase Shift	±3 at 100kHz					
SIGNAL ACQUISITION						
Real Time Sample Rate	2.5GSa/s	5GSa/s	2.5GSa/s	5GSa/s	5GSa/s	5GSa/s
ETS Sampling Rate	100GSa/s maximum for all models					
Record Length	25k points					
Acquisition Mode	Normal, Average, Peak Detect, High Resolution, Single					
Peak Detection	2ns (Max.) Normal: Acquire sampled values ; Average: From 2 ~ 256 waveforms included in average ; Peak Detect: Capturesglitches as narrow as 2 ns at all sweep speeds ; Hi Res: Real-time boxcar averaging reduces random noise andincreases vertical resolution.					
SIGNAL ACQUISITION						
Cursors	Amplitude, Time, Gating available					
Automatic Measurements	28 sets: Vpp , Vamp , Vavg , Vrms , Vhi , Vlo , Vmax , Vmin , Rise Preshoot/ Overshoot , Fall Preshoot/Overshoot, Freq , Period , Rise Time , Fall Time , Positive Width , Negative Width , Duty Cycle, Phase, and eight different delay measurements (FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF)					
Cursors Measurements	Voltage difference between cursors (±V) Time difference between cursors (±T)					
Auto counter	6 digits, range from 2Hz minimum to the rated bandwidth					
POWER MEASUREMENTS (OPTION)						
Power Quality Measurements	VRMS, VCrest Factor, Frequency, IRMS, ICrest Factor, True Power, Apparent Power, Reactive Power, Power Factor, Phase Angle.					
Harmonics	Freq, Mag, Mag rms, Phase, THD-F, THD-R, RMS					
Ripple Measurements	V ripple ,I ripple					
In-rush current	First peak, second peak					
CONTROL PANEL FUNCTION						
Autoset	Single-button, automatic setup of all channels for vertical, horizontal and trigger systems, with undo autoset					
Auto-Range	Allow users to quickly move from test point to test point without having to reset the oscilloscope for each test point					
Save Setup	20set					
Save Waveform	24set					
DISPLAY SYSTEM						
TFTLCD Type	8" TFTLCD SVGAcolor display(LED Back-light)					
Display Resolution	800 horizontal x 600 vertical pixels (SVGA)					
Interpolation	Sin(x)/x & Equivalent Time Sampling					
Waveform Display	Dots, vectors, variable persistence, infinite persistence					
Display Graticul	8 x 10 divisions					
Display Brightness	Adjustable					
INTERFACE						
RS-232C	DB-9 male connector					
USB Port	2 sets USB 2.0 High-speed host port ;1 set USB High-speed 2.0 device port					
Ethernet Port	RJ-45 connector, 10/100Mbps					
SVGAVideo Port	DB-15 female connector, monitor output for display on SVGAmonitors					
GPIB	USB-to-GPIB converter (Option)					
Go/NoGo	BNC 5V Max/10mATTLOpen collector output					
Internal Flash Disk	64MB					
Kensington Style Lock	Rear-panel security slot connects to standard Kensington-style lock					
Line Output	3.5mm stereo jack for Go/NoGo audio alarm					
POWER SOURCE						
Line Voltage Range	AC 100V ~ 240V, 48Hz ~ 63Hz, Auto selection					
Dimensions & Weight	400(W) X 200(H) X 130(D)mm, Approx. 4 kg					

FT 6XXX A00- Specifications can be updated without notice

Sefram
INSTRUMENTS & SYSTEMES

AFAQ ISO 9001 AFAQ N°1997/7001

32, rue Edouard Martel • B.P. 55 • 42009 - St Etienne cedex 2

0.15€ TTC/mn 0 825 56 50 50

Fax. +33 (0).4.77.57.23.23

Web : www.sefram.fr • e-mail : sales@sefram.fr

For assistance and ordering