Preliminary Information STATION MAX

STATION MAX is a Multifunctional Workstation which can be expanded via Software. Here is an example of a Combination of a High-End 4 Channel Oscilloscope and a High End 5 GHz Arbitrary Waveform Generator

General features of STATION MAX:

- 15.6-inch high-definition touch screen with adjustable viewing angle, supports multi-window gesture operation
- Multi-function attached screen: can be extended as the main screen window, and can customize the shortcut menu
- Multi-Interface: USB3.0 Host & Device, LAN (LXI), 10G SFP+, HDMI, TRIG OUT
- Electronic label with key performance
- Knob switch with photoelectric encoder longer lifetime and stay reliability

Oscilloscope

RIGOL's New 4 GHz Bandwidth Oscilloscope

Unique highlights of USP:

- 4GHz bandwidth oscilloscope with self-developed chip
- The main screen supports multi-window split screen display
- Support up-to 16-bit high definition mode
- Key parameters displayed in electronic front label, changing after upgrade.

Features:

- Analog channel bandwidth: 2.5GHz and 4GHz two models
- The highest real-time sampling rate: 20 GSa/s
- Waveform capture rate: 1M wfms/s
- Maximum memory depth of 2000Mpts
- 2000 /s FFT with hardware acceleration.
- Support bus decoding, eye diagram, jitter test, consistency analysis
- Support up-to 16-bit high definition mode
- 4 analog channels, 1 EXT input channel, 10MHz reference clock input and output

Application:

- Combined with analysis tools such as eye diagram and jitter, applied to the agreement consistency analysis
- Serial bus analysis in computer, embedded, automotive electronics and other fields
- Higher bandwidth, meeting the requirements of complex test systems such as industry and scientific research
- High-resolution mode achieves lower noise and is applied to power integrity analysis

Benefits:

- 4GHz bandwidth oscilloscope equipped with an independent chip provides customers with a new choice of mid-to-high-end oscilloscopes
- Support protocol compliance test / serial bus analysis / Multi-domain test to enhance the usage value of equipment
- Interactive design that is more in line with usage habits (adjustable viewing angle, custom buttons, better touch experience), improve work efficiency
- Investment protection with high scalability and long service life

Arbitrary Waveform Generator

High fidelity signal, reconstruction of real application scenarios

Unique highlights of USP:

- High: Both high bandwidth and high resolution (5GHz bandwidth, 12GSa/s sampling rate, 16bit vertical resolution)
- Multi: The delay between channels can be as low as 10ps and supports channel expansion
- Long: Create long-term complex waveforms and dynamic jumps, up to 4G sample point wavetable, support dynamic jumps through advanced sequence functions (16384 entries)
- Fast: Support phase coherent fast frequency hopping signal synthesis, frequency hopping speed 80ns

Features:

- High resolution and high bandwidth: 16bit vertical resolution, 5GHz bandwidth
- Unique SiFiIII technology: expand to a variable sampling rate range of 1uSa/s~5GSa/s (12GSa/s during interpolation), generate arbitrary waveforms point by point, restore signals without distortion, total jitter as low as 10ps, random jitter as low as 350fs
- Larger wave table length: single channel 4GSa, multi-channel use 1.5GSa
- Support the creation of advanced sequences (up to 16384 entries) and define multiple complex waveform outputs
- Excellent phase noise performance -112dBc/Hz@10kHz offset, -70dBc spurious-free dynamic range
- High-precision synchronization, the skew offset repeatability between any two channels is 10ps
- Channel arbitrary waveform storage depth up to 4G sampling points
- Single 4 channels, equivalent to four independent signal sources

Applications:

- Directly generate RF signals up to 5GHz for communication-related applications
- Provide fast pulses, data streams and clocks for cutting-edge scientific research
- Provide low-latency multi-channel synchronization signals for quantum research
- Provide high-quality and long-term waveform restoration for complex environment simulation

Benefits:

- 16bit vertical resolution and 5GHz bandwidth effectively guarantee the quality of the generated RF signal
- Provides a single channel with the highest 4GSa memory and advanced sequence functions to complete the reconstruction of complex environmental signals
- The delay between channels can be as low as 10ps, and the channel expansion supports up to 224 channels

- Inter-symbol interference (ISI) and jitter values can be set to meet the stress test of high-speed serial bus receivers
- Support phase coherent fast frequency hopping signal synthesis, frequency hopping speed can be up to 80ns
- Through the 15.6-inch multi-touch capacitive screen, obtain the local arbitrary waveform and advanced sequence editing experience consistent with PC software;
- Customer experience (6-core processor, Android platform touch experience, photoelectric encoder, software-defined buttons, electronic signs, etc...)

Oscilloscope and Arbitrary Waveform Generator are also as single devices available

DS70004: RIGOL'S new 4 GHz / 20 GSa/s Oscilloscope

DG70004: RIGOL'S new 5 GHz / 12 GSa/s ARB Generator

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