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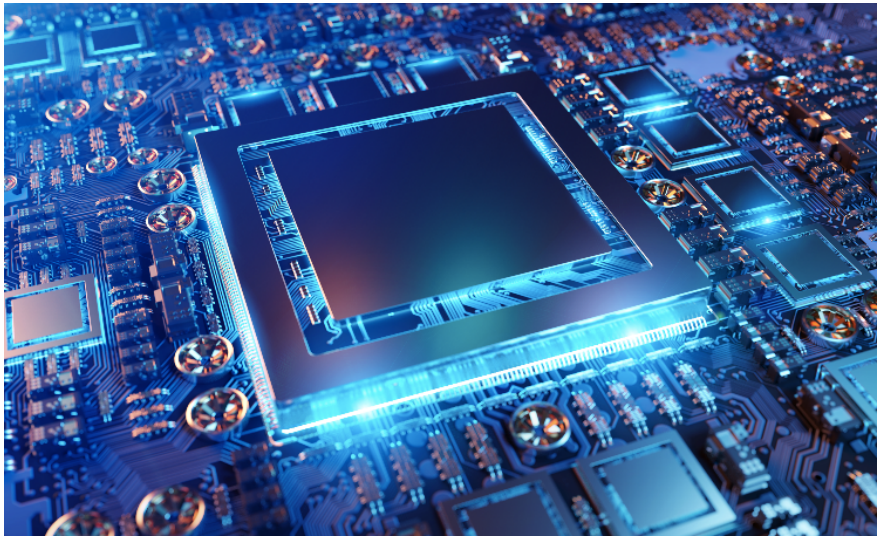
UNLOCKING THE POWER
OF PHOTONICS



Nicslab, a fabless chip company, developing electronic and photonic integrated circuits for future optical solutions in data centers, AI and quantum computing. Our solution controls the light to process information, transfer data faster and more efficiently.

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## OUR PRODUCTS & SERVICES

- Scalable photonic integrated circuits controller
  - XDAC
  - XPOW
  - Custom / OEM / ODM /Integration
- FPGA - ASIC electronic photonic design service
  - RTL verification / IP integration
  - Silicon photonic heterogeneous integration

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NEW PRODUCT

# XDAC

## SCALABLE PHOTONIC INTEGRATED CIRCUIT CONTROLLER

The XDAC system is a complete, compact, programmable, affordable and easy to use multichannel source measurement system for low power applications from simple electronic circuits to complex photonic integrated circuits.


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# Better control, more accurate with rich features


- Enable range span configuration through software
- High-resolution control with 16-bit standard
- High scalability 120 channels in a box
- Flexible unipolar and bipolar output
- Gigabit Ethernet
- Functional GPIO
- USB ports

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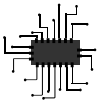
# Your new source measurement system

The scalability, flexibility, and performance of the XDAC revolutionize the conventional source measurement unit. For the first time, we've built a complete scalable source measurement system experience. Whether you're sourcing devices, measuring parameters, automating experiments or analyzing data, you'll find the easy to use and flexible experience - but on a compact and much more cost-effective instrument.

## Real-time monitoring

XDAC equipped with high responsivity sensors per channel and high resolution converter combine with high-speed real-time voltage and current reading.



## Flexible output range

Your XDAC comes with range span configuration technology that enables the user to select the output range with software without losing control of the high-resolution feature.

## Easy to use GUI

We are making the graphical user interface simple with many features depend on what you need.

## High scalability

Start from 8 channels output per unit to 120 channels in a single box. It also enables distributed control for the larger channels.

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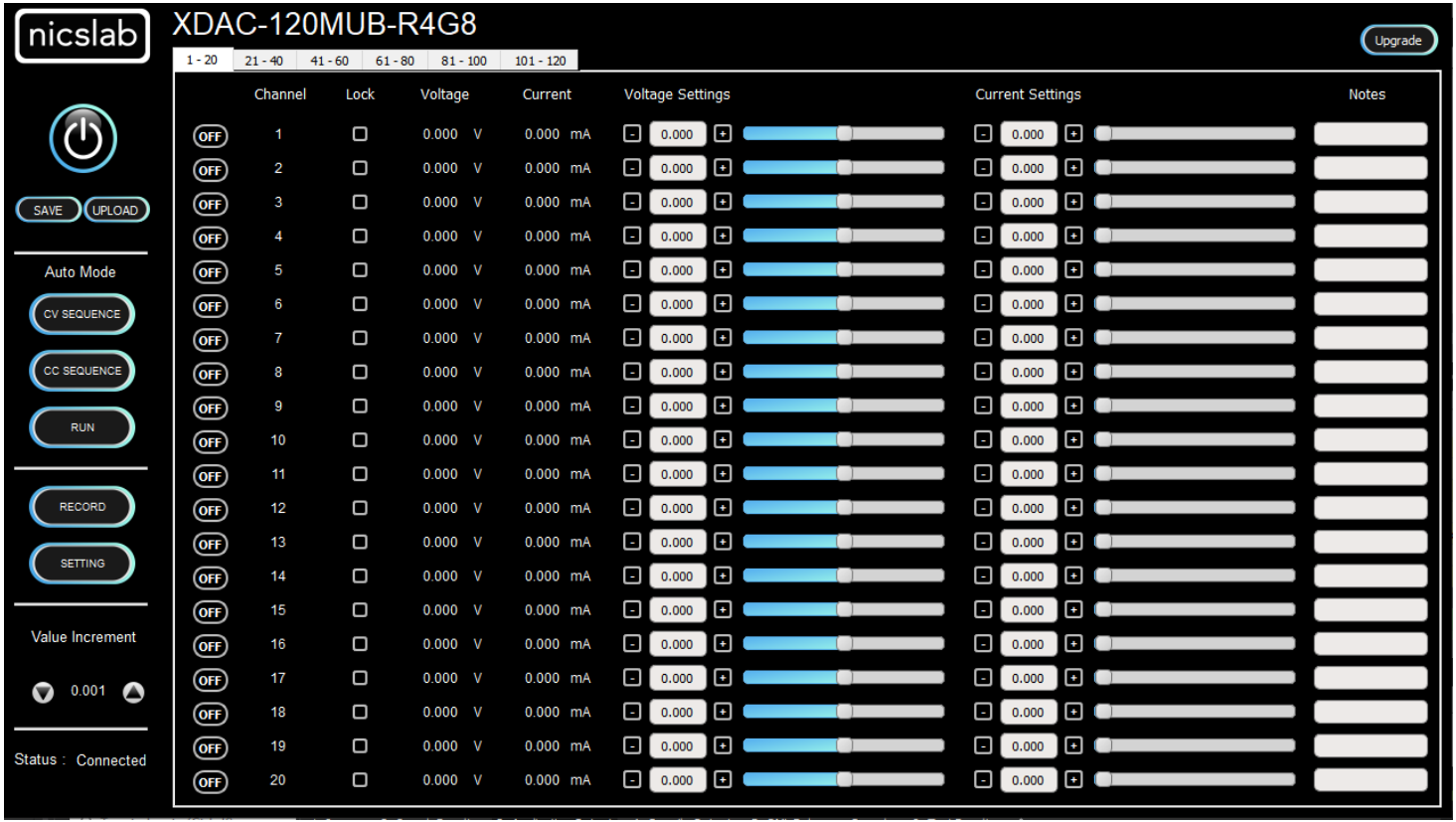
# Graphical User Interface (GUI)

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# Model Comparison

| XPOW | XDAC-XU | XDAC-XMUB | XDAC-XMUB |
|---|---|---|---|
| 8/40/120 Channels | 8/40/120 Channels | 8/40/120 Channels | 8/40/120 Channels |
| 16-bit resolution control | 16-bit resolution control | 16-bit resolution control | 16-bit resolution control |
| 8-bit AVR RISC-based microcontroller | Quad core Cortex 64-bit ARM v8 | Quad core Cortex 64-bit ARM v8 | Quad core Cortex 64-bit ARM v8 |
| 0 - 36 Volt, 0 - 300 mA (Basic)<br>+<br>0 - 5 Volt, 0 - 10 Volt, 0 - 20 Volt, 0 - 200 mA, 0 - 100 mA, 0 - 50mA (Premium feature) | 0 - 36 Volt, 0 - 300 mA (Basic)<br>+<br>0 - 5 Volt, 0 - 10 Volt, 0 - 20 Volt, 0 - 200 mA, 0 - 100 mA, 0 - 50mA (Premium feature) | ±18 Volt , ±500 mA (Basic)<br>+<br>±2.5 Volt, ±5 Volt, ±10 Volt (Premium feature) | ±18 Volt , ±500 mA (Basic)<br>+<br>±2.5 Volt, ±5 Volt, ±10 Volt (Premium feature) |
| USB ports | Gigabit Ethernet, USB ports | Gigabit Ethernet, USB ports | Gigabit Ethernet, USB ports |
| Shared Ground | Shared Ground | Shared Ground | Un-Shared Ground |

## Software

[a] Basic features: slider, voltage reading, current reading, enable SCPI command.

[b] Premium features: Basic + notes, lock, save & load setting, record, sequence, programming template, range span configuration

*Range span configuration: enables the user to select the output range with software without losing control of the high-resolution feature.

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