NORMA

Real Machine

Widest QPU Variety

On demand

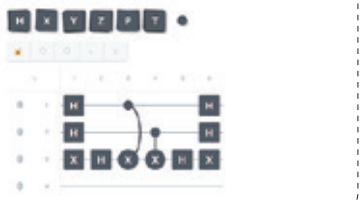
Global No.1

Real quantum cloud computing with multi-QPU

Quantum Cloud Service

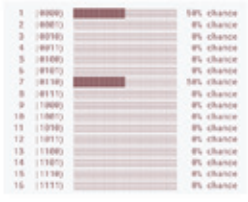
Quantum Program Development & Execution Environment
Q Platform: The Beginning of Quantum Cloud

Key Features



Q Editor

· Quantum circuit simulation editor



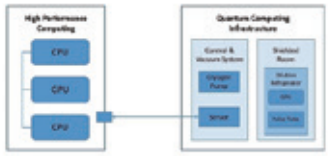
Real-time Result Update

· Real-time result output & easy modifications

Free Open Source

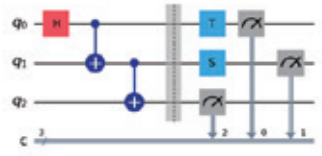
· Documented API

Tutorials



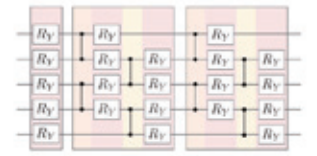
Basic Guide to Quantum Computing

· Introduction to core elements of quantum computing



Guide to Quantum Computing with Qiskit

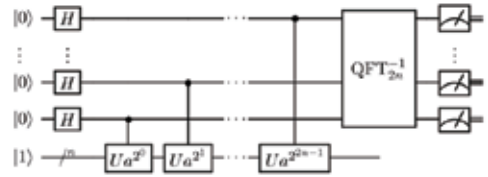
· Guide to quantum circuit measurement and OpenQASM usage



Guide to Quantum AI Using Pennylane

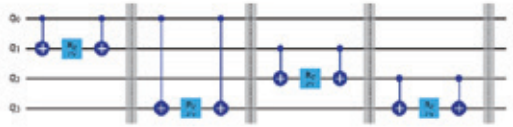
· Overview and guide to using Pennylane
· Gradient calculation
· Understanding and applying quantum operators

Quantum Algorithms



Examples of Quantum Algorithms

· Introduction to major algorithms such as Grovver / Shor algorithms



Case Studies Applying Quantum Algorithms

· Guide to applying quantum algorithms in practical quantum computing scenarios

Quantum Cloud Expansion

More Quantum Computers, Easier Access

One Platform, Multiple QPUs

Global No.1 K-Quantum Cloud

Access to implementation architectures — Superconducting, Ion Trap, Neutral Atom, Photonic, Silicon Spin
Integrated QPU Selection, Comparison and Testing

Quantum Cloud Experience

Widest QPU Variety

Real-machine-based Quantum Computing Resources

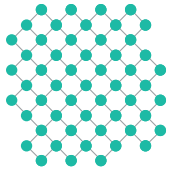
Unified multi-QPU environment run by a single code across multiple QPUs
Hybrid integration of simulator (HPC) and real QPU to reduce cost and time

• Super -conducting

NORMA
QC-32
Status Online
Type Superconducting
Qubits 32

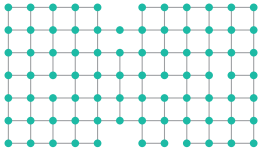
32Qubit

NORMA
QC-50
Status Online
Type Superconducting
Qubits 50



54Qubit

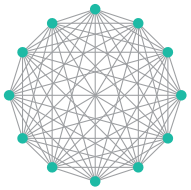
NORMA
QC-84
Status Online
Type Superconducting
Qubits 82



84Qubit (82+2)

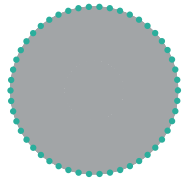
• Ion Trap

NORMA
QC-12
Status Online
Type Ion-Trap
Qubits 12



12Qubit

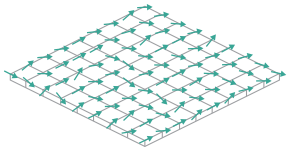
NORMA
QC-50
Status Online
Type Ion-Trap
Qubits 50



50Qubit

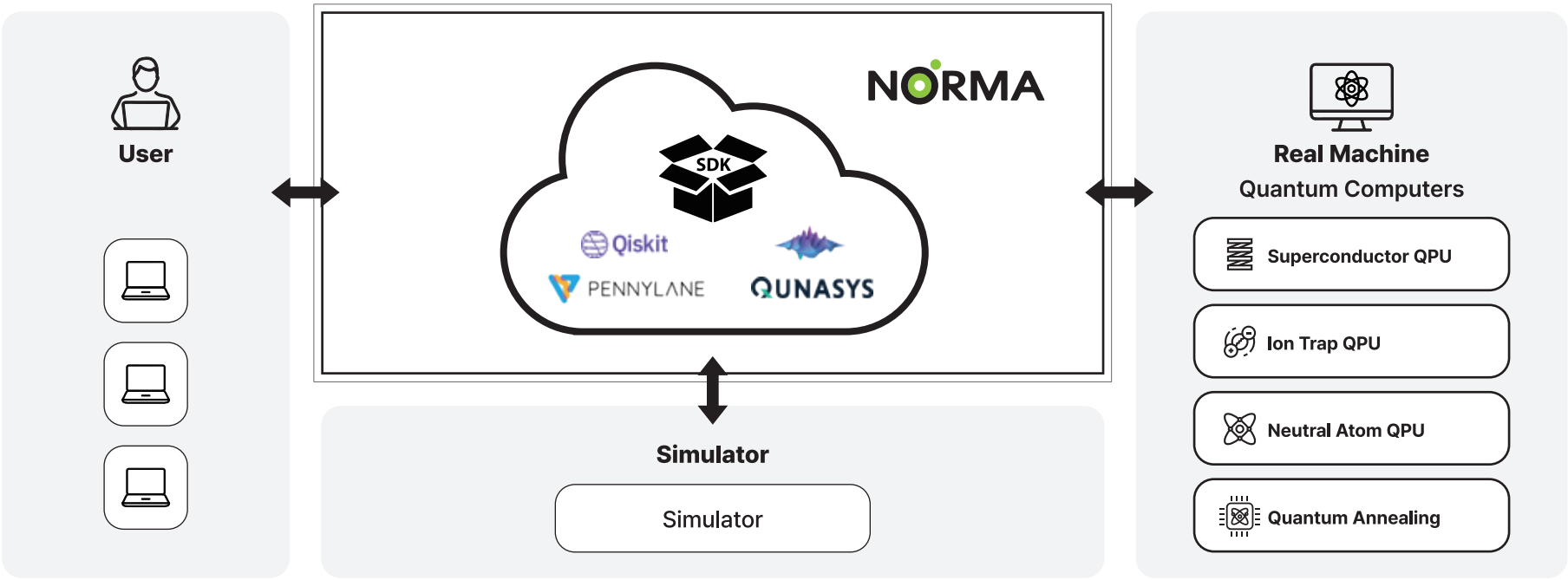
• Photonic

NORMA
QC-D3
Status Online
Type Photonic
Variables(Max) 949



949Qudit

Archi-tecture



Multi-QPU Access via Q Platform — Anytime, Anywhere, No Reservation Required

Supports the most diverse QPU lineup	On-demand service available without reservation	API- and portal-based SaaS tailored to customer needs
Reselling support through QPU and service packages	Customized algorithm bundles tailored to industry needs	Cloud & on-premises deployment options
Multi-QPU support, data analysis & reporting, and advanced services based on quantum algorithms		

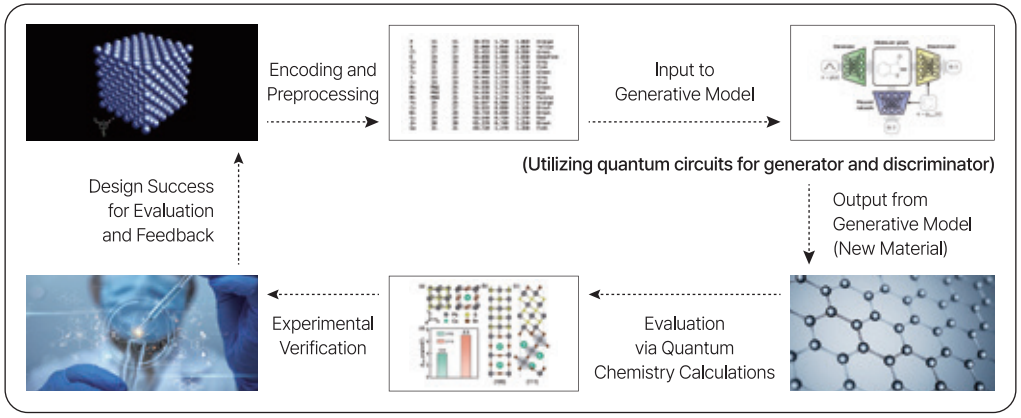
Using the Quantum Cloud

Chemistry Simulation

Optimization

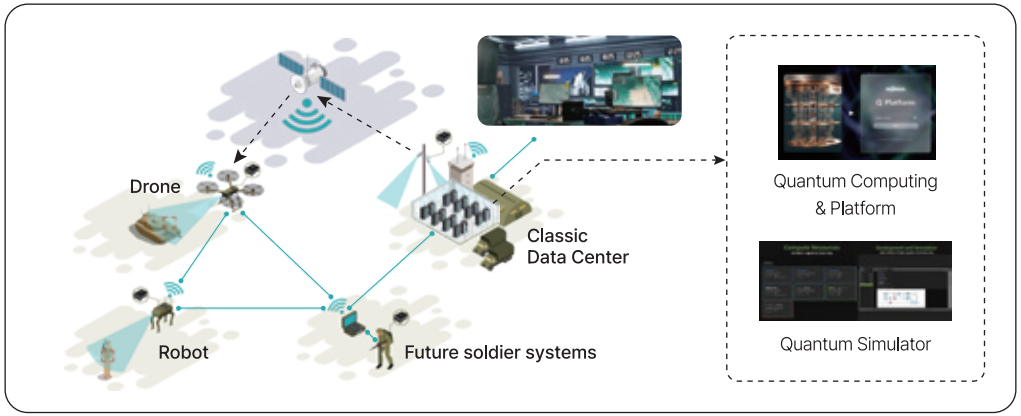
New Material Development

Catalyst Design for CO2 Conversion Reactions



Defense sector

Optimization of Manned-Unmanned Integrated Systems



Machine Learning

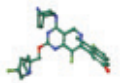
Bio Sector

Drug Discovery R&D

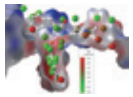
Input

SMILES & SELFIES

Experimental ligand sampling



Protein-specific virtual screening & ligand library compilation



Comp.

Quantum Algorithms

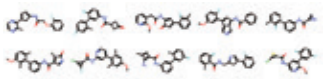
Quantum-Classical Hybrid GAN (QGAN)

Quantum Circuit Born Machine (QQBM)

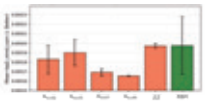
Output

Generated Molecules

Drug candidate selection & synthesis



Boosted performance metrics



Finance Sector

Development of a Quantum AI-based Credit Scoring System (CSS)

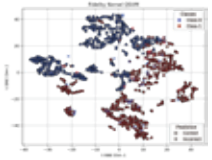
Input

Client Payment Histories

Historical data
(e.g. transaction dates, amount, # of overdue payments etc.)

Comp.

Prediction via Quantum Machine Learning



(VQC, QSVM)

Output

Prediction of overdue payment

>93%*

Prediction accuracy

*: Example result prediction rate

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