

Stage	1	2	3	4	5
AI-Native Database	<b>AI-Advised</b> <ul style="list-style-type: none"> <li><b>Workload Manager</b> (e.g., modeling, scheduling, predicting)</li> <li><b>SQL Optimization</b> (e.g., SQL rewriter, view advisor, index advisor)</li> <li><b>DB Maintenance</b> (e.g., performance monitoring, tuner, data migration, fault tolerance)</li> <li><b>Security</b> (e.g., intelligent masking/auditing/detecting)</li> </ul>	<b>AI-Assisted</b> <ul style="list-style-type: none"> <li><b>Merge AI tools into DB kernel</b></li> </ul>	<b>AI-Designed</b> <ul style="list-style-type: none"> <li><b>Self-Configuring</b> (e.g., tuning, software upgrade, data partitioning)</li> <li><b>Self-Healing</b> (e.g., automatic failover, automatic recovery, preventive alerts)</li> <li><b>Self-Optimizing</b> (e.g., stats collection, index design, MQT design)</li> <li><b>Self-Protecting</b> (e.g., throttling requests competing resources)</li> <li><b>Self-Inspecting</b> (e.g., consistency check, health check)</li> </ul>	<b>AI-Assembled</b> <ul style="list-style-type: none"> <li><b>Support different computing powers</b> (e.g., ARM, GPU, NPU)</li> <li><b>Heterogeneous computing architecture</b></li> </ul>	<b>AI-Designed</b> <ul style="list-style-type: none"> <li><b>Database initialization</b></li> <li><b>Database design</b></li> <li><b>Database implementation and loading</b></li> <li><b>Database testing and evaluation</b></li> <li><b>Database operation, maintenance and evolution</b></li> </ul>