XTS TRANSPORT LAYER – XPU Settings

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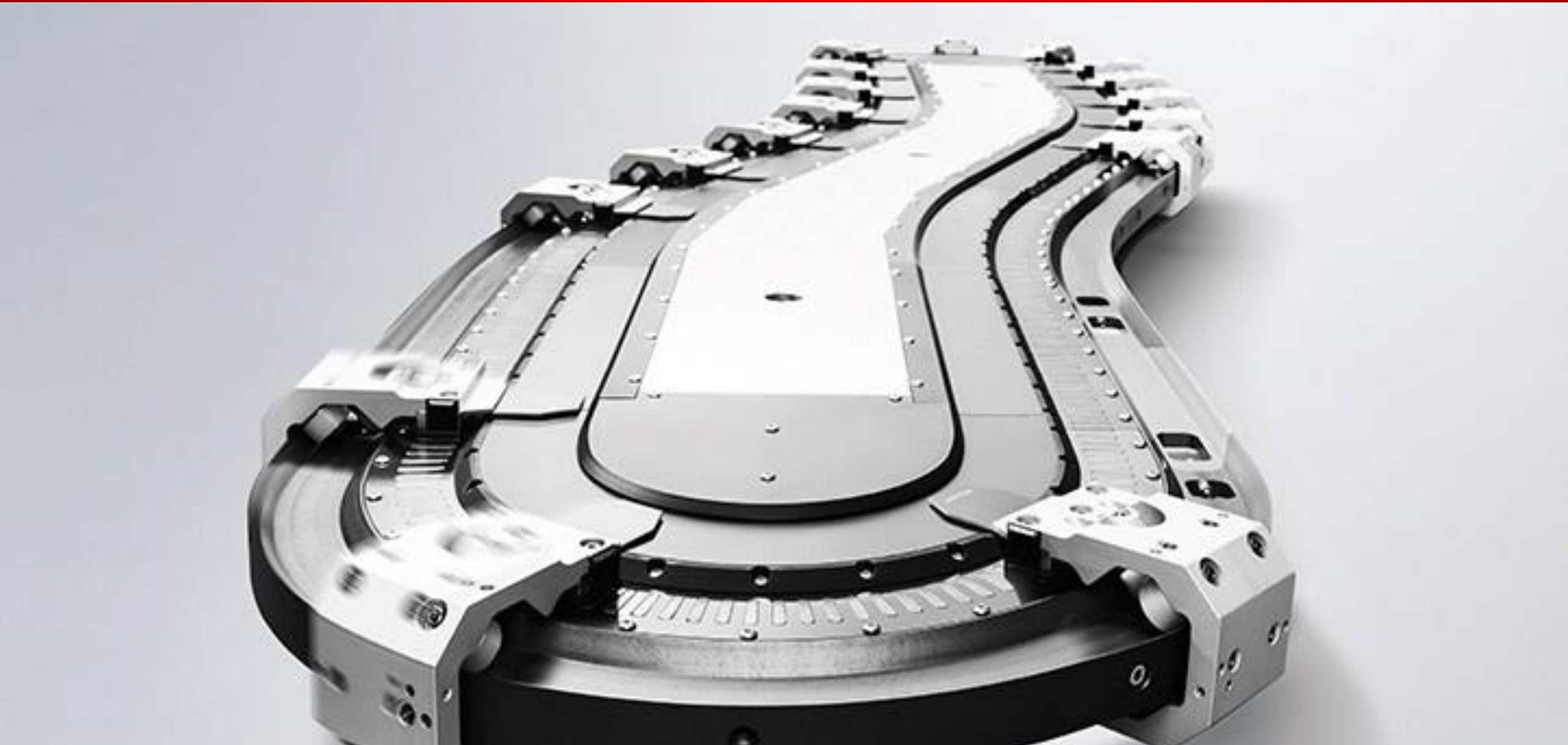

TcIoXtsProcessingUnit (XPU)

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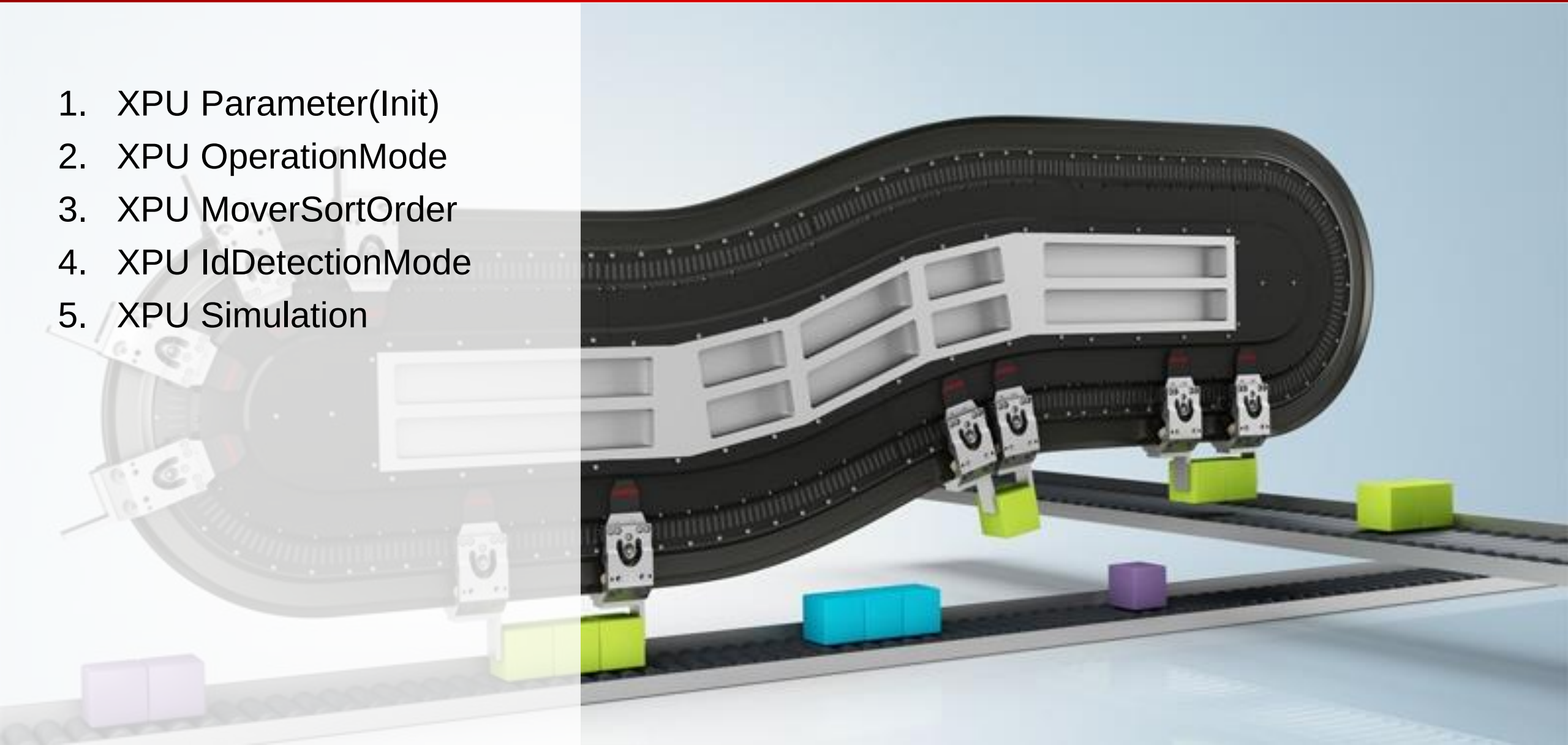
1. XPU Parameter(Init)
2. XPU OperationMode
3. XPU MoverSortOrder
4. XPU IdDetectionMode
5. XPU Simulation



XPU Parameter(Init)

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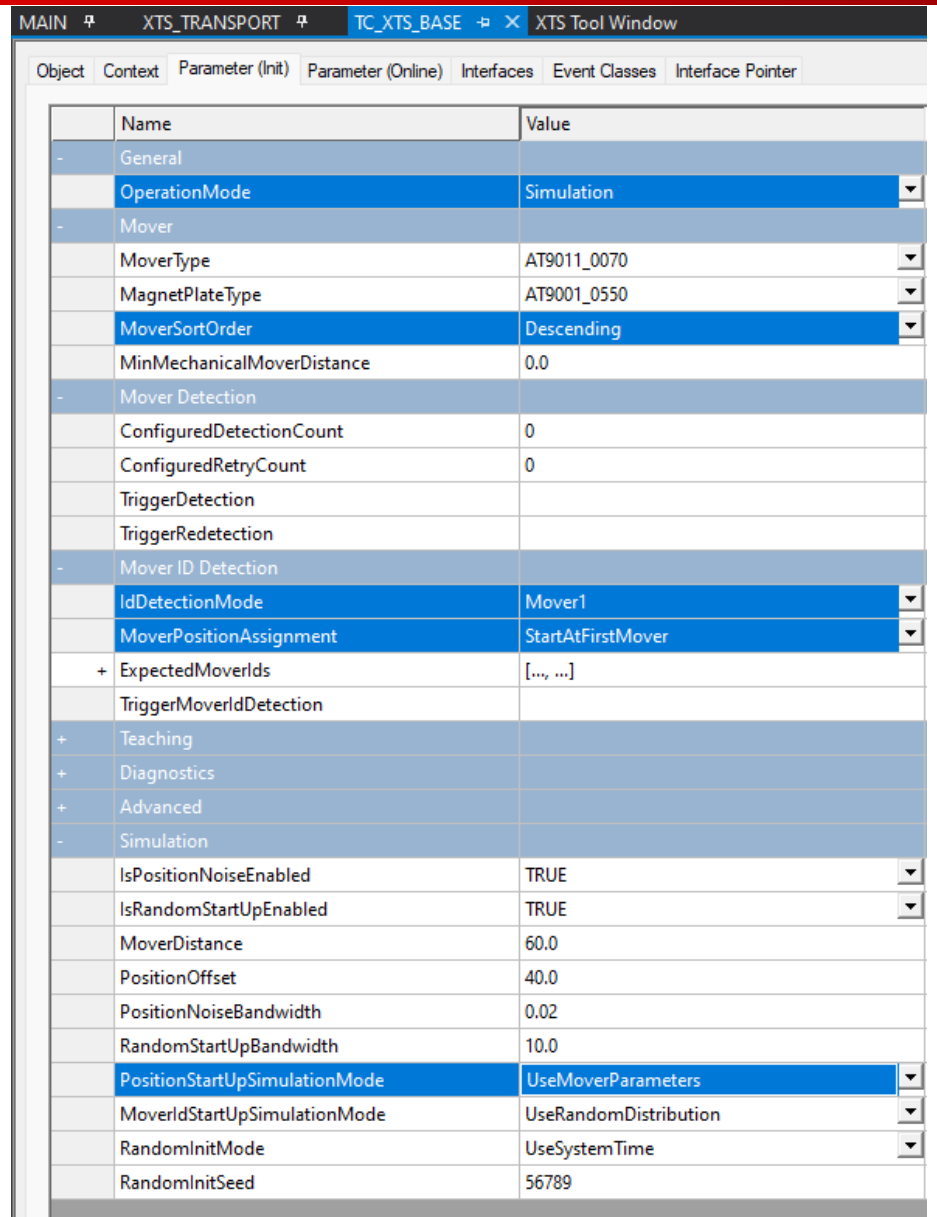
- **Required settings:**
  - MoverSortOrder
    - Descending (position based)
  - MoverIdDetectionMode
    - Mover1
  - MoverPositionAssignement
    - StartAtFirstMover
  - PositionStartUpSimulationMode
    - UseMoverParameters



XPU OperationMode

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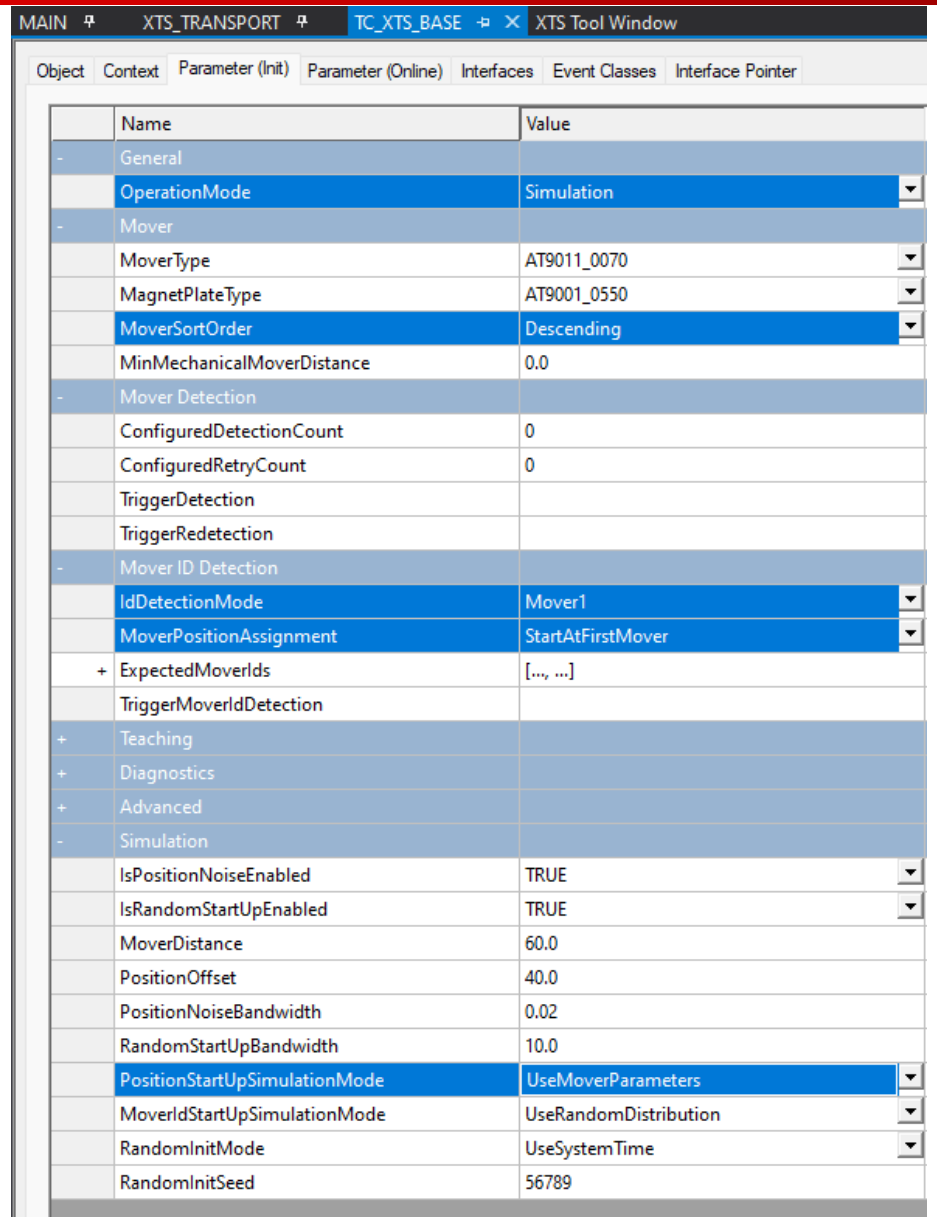
- **Switch for using real or simulated hardware in TcIoXts driver:**
  - Simulation:
    - Movement based on setpoint generator output.
  - Normal:
    - Control feedback from MC Controller / SoftDrive



XPU MoverSortOrder

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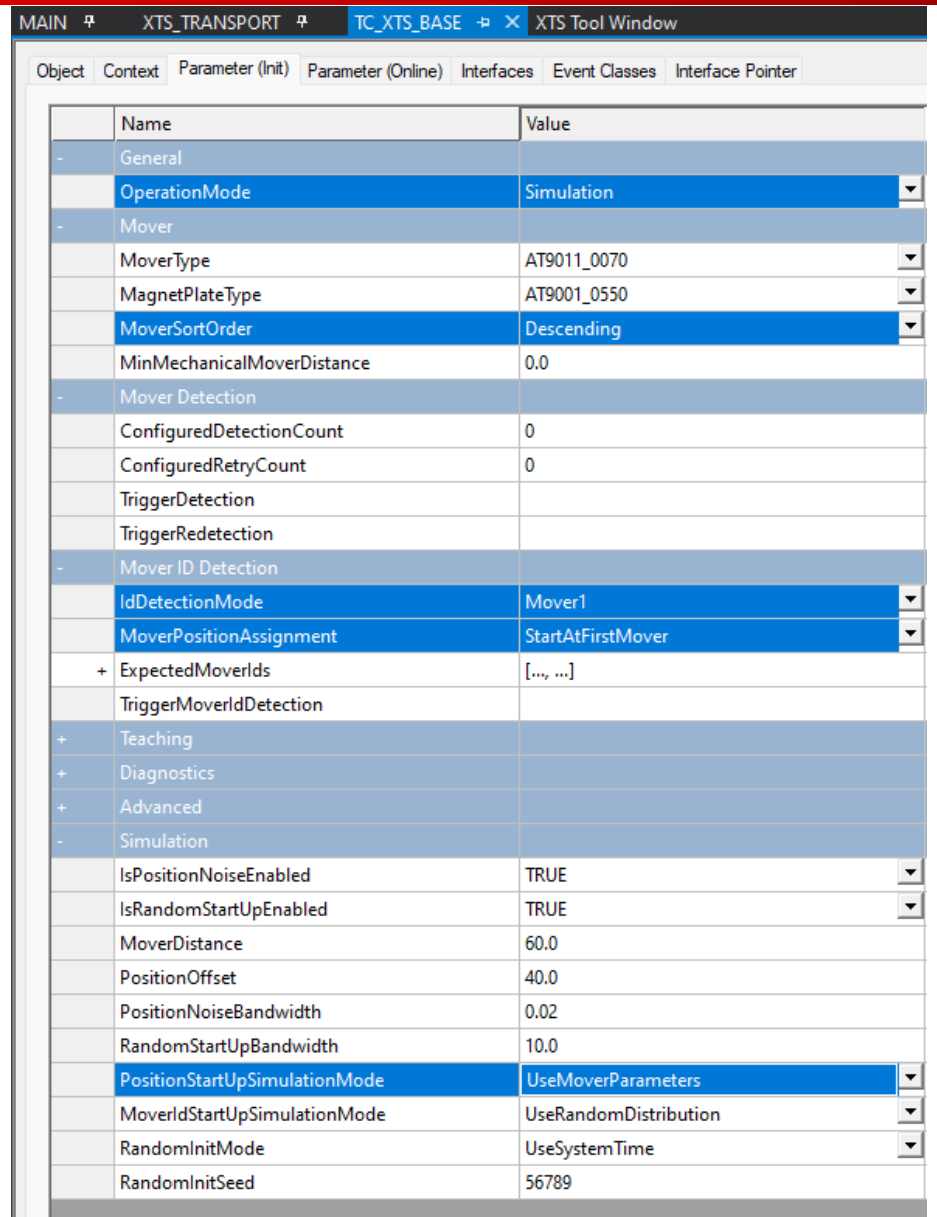
- **Mover detection cycle at startup:**
  - XPU detects all movers at startup:
    - MoverSortOrder sets search direction
    - Position based
  - Ascending:
    - Position from mover-to-mover increases
  - Descending:
    - Position from mover-to-mover decreases



XPU IdDetectionMode

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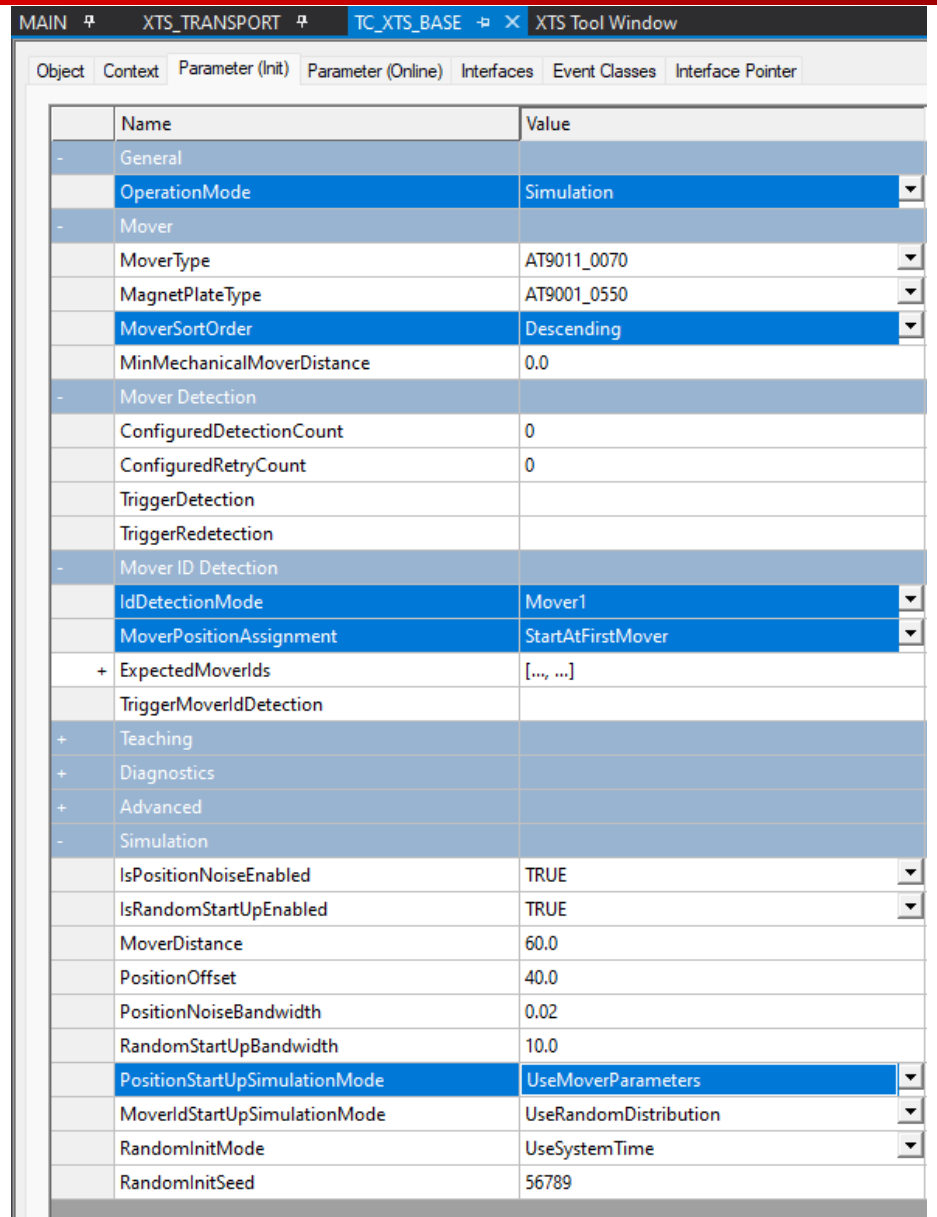
- **Mover 1 detection after startup:**
  - XPU is triggered by fb_Xpu after successful startup:
    - Mover 1 (recommended for new projects)
      - Inverted magnet plate is detected
    - Standard (compatibility with legacy projects only)
      - Movers are sorted by detection position only, must be assigned/sorted to PLC datafields manually



XPU Simulation

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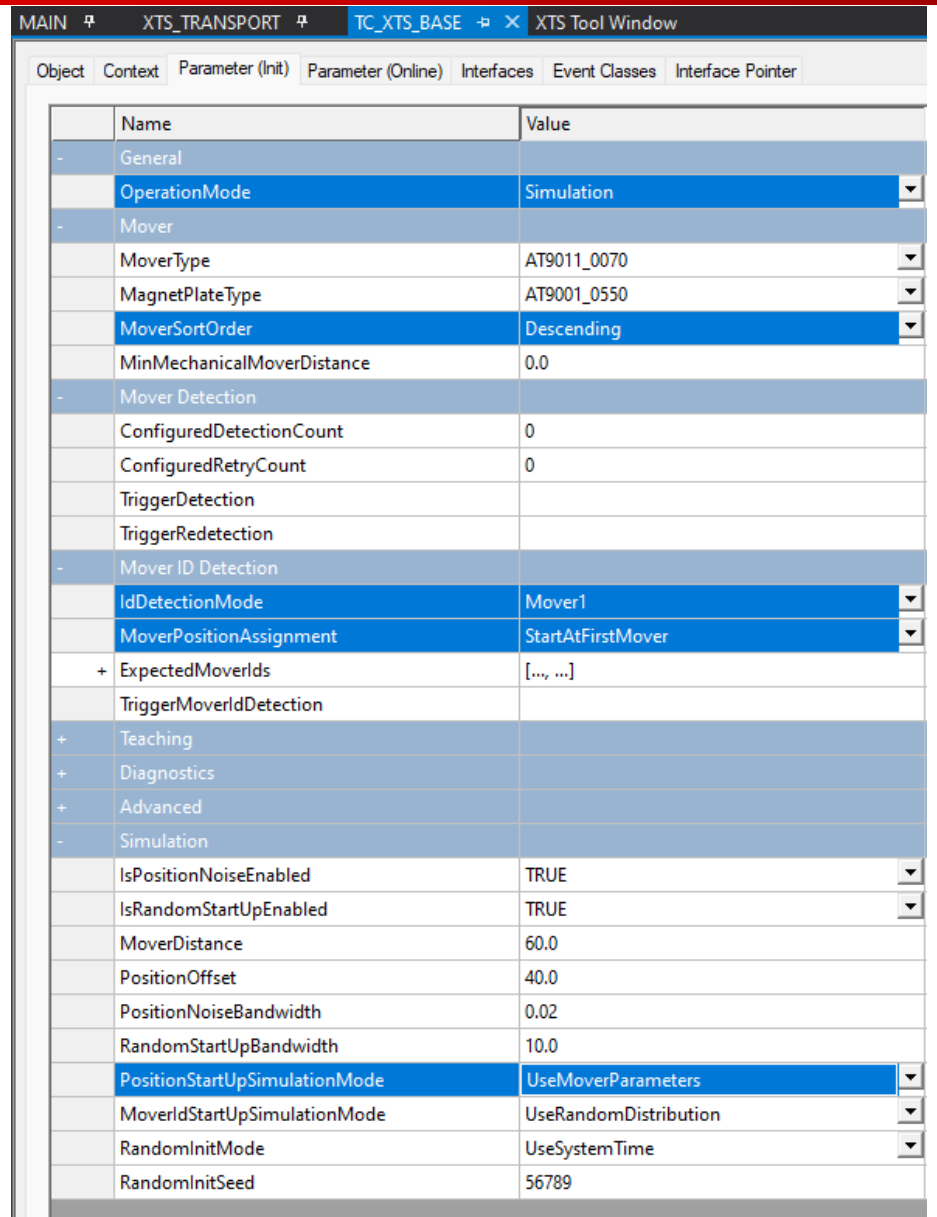
- **Simulation based on setpoint generator in MOTION:**
  - Enables to test PLC code without hardware:
    - StartUp Position is required, since no mover detection is done in OperationMode Simulation.
    - StartUp Position must match Descending sort order
      - Mover 1 → 1900
      - Mover 2 → 1800
      - Mover 3 → 1700
      - …



XPU Simulation

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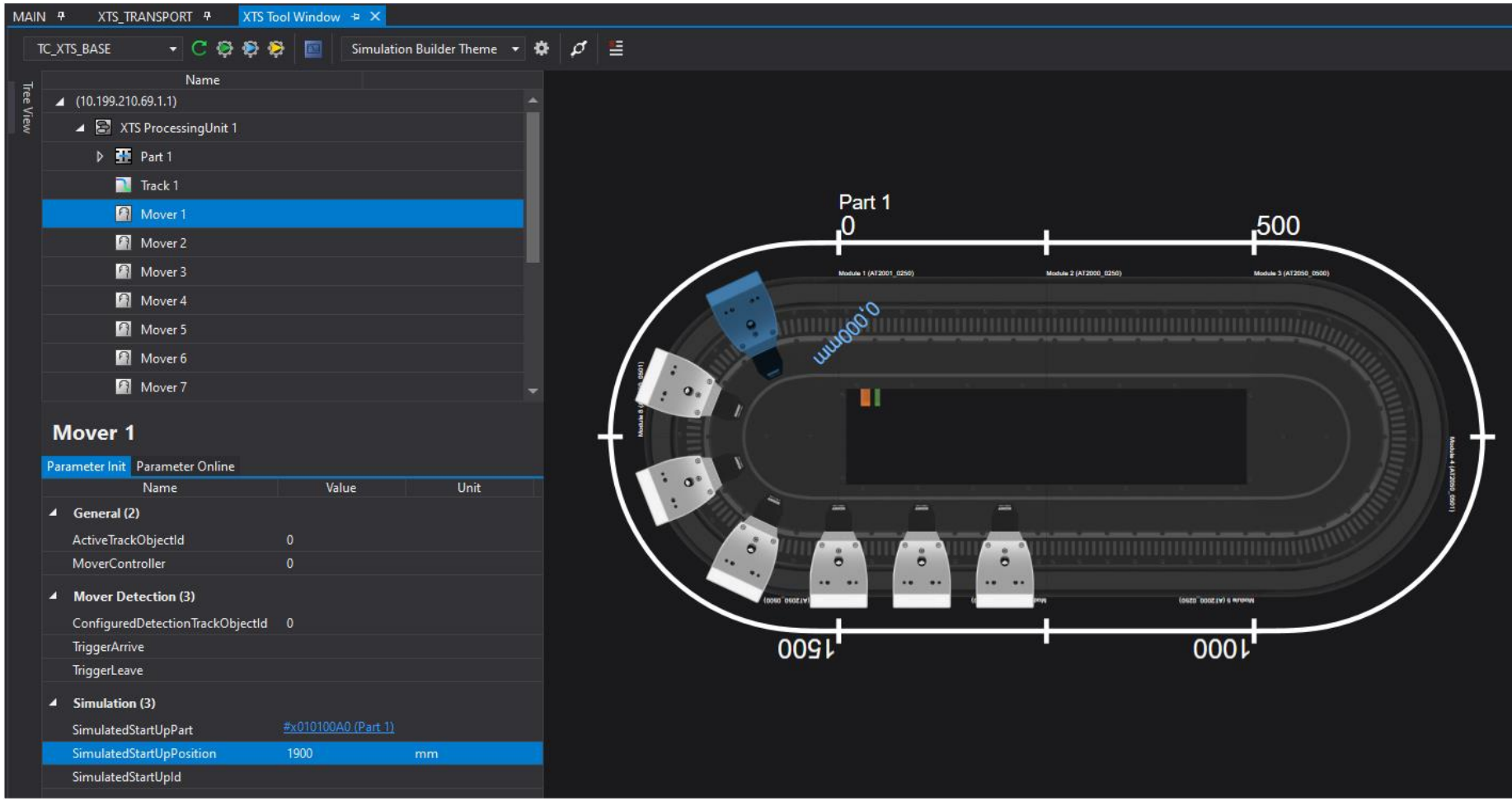
- **StartUp Position:**
  - Xts Tool Window



- **Mover StartUp Position:**

  – Check and/or Change in Mover Object of XPU