

### 3. Controller Portfolio - Specifications

There are **4 levels** of the Controller Portfolio;

- **ESSENTIAL**
- **CORE**
- **ADVANCED**
- **PROFESSIONAL \***

\* Coming Q1 2026

ESSENTIAL	CORE	ADVANCED	PROFESSIONAL *
<b>Ideal For</b> <ul style="list-style-type: none"> <li>• First-time CNC makers</li> <li>• 3-axis CNC mills, routers, and lathes</li> </ul>	<b>Ideal For</b> <ul style="list-style-type: none"> <li>• Experienced makers</li> <li>• Custom shops</li> <li>• Small batch production</li> <li>• Makers needing more precision and automation-ready features</li> </ul>	<b>Ideal For</b> <ul style="list-style-type: none"> <li>• Engineering shops</li> <li>• Prototyping labs</li> <li>• High-volume makers with multiple tools and outputs</li> </ul>	<b>Ideal For</b> <ul style="list-style-type: none"> <li>• High demand, precision-focused environments</li> <li>• Makers with complex machining needs</li> </ul>
<b>Key Features</b> Reliable CNC control solution with 3-axis motion, conversational programming, and PC-less operation.	<b>Key Features</b> 5-axis control, probing, advanced spindle control, laser features, and cloud connectivity.	<b>Key Features</b> High-performance automation and precision with support for multi-head setups, rigid tapping, job rotation, ATCs, advanced probing, and advanced motion control.	<b>Key Features</b> RTCP and Macro (LUA).  *Available first half of 2026

This unified platform means you can grow from Essential to Advanced with a simple software upgrade. The hardware stays the same, but features grow.

- No control cabinet rewiring
- No new hardware needed
- No downtime
- Instant capability expansion

With the new tiered structure, you get the power of MASSO hardware with software tailored to your needs, delivering the right level of control, precision, and automation without the cost of features you don't yet need. Whether you're just getting started, refining your fabrication workflow, or engineering advanced automated systems, there's a MASSO tier designed to take your CNC projects to the next level. Coming in Q1 2026, you'll have the option to upgrade to the Professional level, unlocking powerful capabilities like RTCP and Macro (LUA) programming.

## **ESSENTIAL**

The **Essential** level delivers a straightforward, dependable control solution, perfect for getting started or upgrading your CNC without unnecessary complexity. With 3-axis motion control, conversational programming, and support for up to 100 tools, it covers all the fundamentals. You'll benefit from MASSO's signature standalone, PC-less operation, intuitive interface, solid-state reliability, and seamless software upgrades. It is designed to eliminate the learning curve, so you can focus on building your projects with confidence.

## **CORE**

Building on the Essential level, the **Core** model expands your capabilities with 5-axis motion control, probing, MPG support, and closed loop motor feedback for enhanced control. It adds advanced spindle and laser control, plasma multi-head with DTHC support, and comprehensive coolant management. With Wi-Fi connectivity to your PC, cloud, and mobile app, plus features like auto tool zero and manual tool change alerts, this tier is ideal for makers ready to move beyond the basics and take on more complex projects with greater precision and confidence.

## **ADVANCED**

The **Advanced** level elevates your machining capabilities with powerful automation, sophisticated toolpath control, and a wide range of programmable functions. Designed for demanding workflows, it offers integrated support for multi-head setups, automatic tool changers, advanced probing and advanced motion control. Features like dry run testing, cutter compensation, QR code job loading, and automatic lubrication ensure faster production, exceptional repeatability, and a consistently professional finish.

## Mill Functionality & Technical Features

FEATURES	ESSENTIAL	CORE	ADVANCED	PROFESSIONAL*
3 Axis Motion Control	Yes	Yes	Yes	Yes
Tools & Work Offsets	Yes	Yes	Yes	Yes
Conversational Routines	Yes	Yes	Yes	Yes
Basic Input / Outputs	Yes	Yes	Yes	Yes
5 Axis Motion Control		Yes	Yes	Yes

FEATURES	ESSENTIAL	CORE	ADVANCED	PROFESSIONAL*
Axis Slaving		Yes	Yes	Yes
Parking Offset		Yes	Yes	Yes
Auto Tool ZERO		Yes	Yes	Yes
MPG Support		Yes	Yes	Yes
Wi-Fi for MASSO Link, Cloud and Phone App		Yes	Yes	Yes
Engraving Laser		Yes	Yes	Yes
Multi Head - Plasma Only		Yes	Yes	Yes
Probing		Yes	Yes	Yes
Spindle RPM Control (VFD, PWM & STEP)		Yes	Yes	Yes
Chuck Clamp		Yes	Yes	Yes
Door Control		Yes	Yes	Yes
Motor Feedback Signals		Yes	Yes	Yes
Manual Tool Change		Yes	Yes	Yes
Extended Tools & Work Offsets			Yes	Yes
Multi Head - All			Yes	Yes
Alarms			Yes	Yes
Automatic Tool Changers			Yes	Yes
Dry Run Mode			Yes	Yes
Advanced Input / Outputs (AUX)			Yes	Yes
Coolant Control			Yes	Yes
Lubrication Control			Yes	Yes
QR Scanner Support			Yes	Yes
Cutter Compensation			Yes	Yes
Jump To Line			Yes	Yes
Job Rotation			Yes	Yes

FEATURES	ESSENTIAL	CORE	ADVANCED	PROFESSIONAL*
Macro (LUA)*				Yes

\* Coming Q1 2026

## Lathe Functionality & Technical Features

FEATURES	ESSENTIAL	CORE	ADVANCED	PROFESSIONAL*
2 Axis Motion Control	Yes	Yes	Yes	Yes
Tools & Work Offsets	Yes	Yes	Yes	Yes
Conversational Routines	Yes	Yes	Yes	Yes
Basic Input / Outputs	Yes	Yes	Yes	Yes
Parking Offset		Yes	Yes	Yes
MPG Support		Yes	Yes	Yes
Wi-Fi for MASSO Link, Cloud and Phone App		Yes	Yes	Yes
Spindle RPM Control (VFD, PWM & STEP)		Yes	Yes	Yes
Chuck Clamp		Yes	Yes	Yes
Door Control		Yes	Yes	Yes
Motor Feedback Signals for Closed Loop		Yes	Yes	Yes
Manual Tool Change		Yes	Yes	Yes
Alarms			Yes	Yes
Automatic Tool Changers			Yes	Yes
Advanced Input / Outputs (AUX)			Yes	Yes
Coolant Control			Yes	Yes

FEATURES	ESSENTIAL	CORE	ADVANCED	PROFESSIONAL*
Lubrication Control			Yes	Yes
QR Scanner Support			Yes	Yes
Multipass Synchronized Threading			Yes	Yes
Macro (Lua)*				Yes


\* Coming Q1 2026

## What happens if I try to use a feature that isn't part of my current level?

If you click on a feature that isn't included in your level, the following pop up will be displayed on your controller.



Scan the QR code to view your controller's level and upgrade instantly to access additional features.

Controller Portfolio

# MASSO G3: **CORE**

Machine Type: MillSerial Number: 10000

UPGRADE TO ADVANCED



## Compare Features. Choose Your Next Upgrade.

Your controller delivers powerful performance at every level. Review your current features and explore advanced capabilities available in higher levels. When you're ready to scale up, a simple upgrade unlocks more precision, flexibility, and control.

YOU ARE HERE

WHAT FEATURE ARE YOU LOOKING FOR?

FEATURES	ESSENTIAL	CORE	ADVANCED
3 Axis Motion Control with Spindle C Axis Control	✓	✓	✓
Tools & Work Offsets	✓	✓	✓
Conversational routines	✓	✓	✓
Basic Inputs / Outputs	✓	✓	✓

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Controller Portfolio levels can be easily upgraded via **myWorkshop** to unlock additional features with **no hardware upgrade**.