

SK352 *Jura* - Phase-Lock Controller

Reference

The Reference signal is fed from an external RF source and provides the phase reference to which the feedback signal is locked.



FP

SMA REF1

Feedback

The Feedback signal is provided by an RF VCO or a laser beat note. Its phase is locked to the reference using the PLC module.



FP

SMA FBK1

The diagram illustrates the internal structure and output options of the frequency actuator. It is divided into two main sections: **Command** and **Monitoring**.

Command Section: A green rectangular block labeled **CMDO** at the top. Inside the block is a circular symbol with a central dot, representing a phase-locked loop. Below this symbol are two labels: **SMA** on the left and **CMDO** on the right. To the right of the block, the text **EXP, UTB** is displayed. A line with a terminal symbol (a circle with a horizontal line) is connected to the **SMA** output on the left side of the block.

Monitoring Section: A green rectangular block labeled **MONO** at the top. Inside the block is a circular symbol with a central dot, representing a phase-locked loop. Below this symbol are two labels: **SMA** on the left and **MONO** on the right. To the right of the block, the text **EXP, UTB** is displayed. A line with a terminal symbol is connected to the **SMA** output on the left side of the block.

Text Labels: The word **Command** is centered below the Command section, and the word **Monitoring** is centered below the Monitoring section.

DIOs

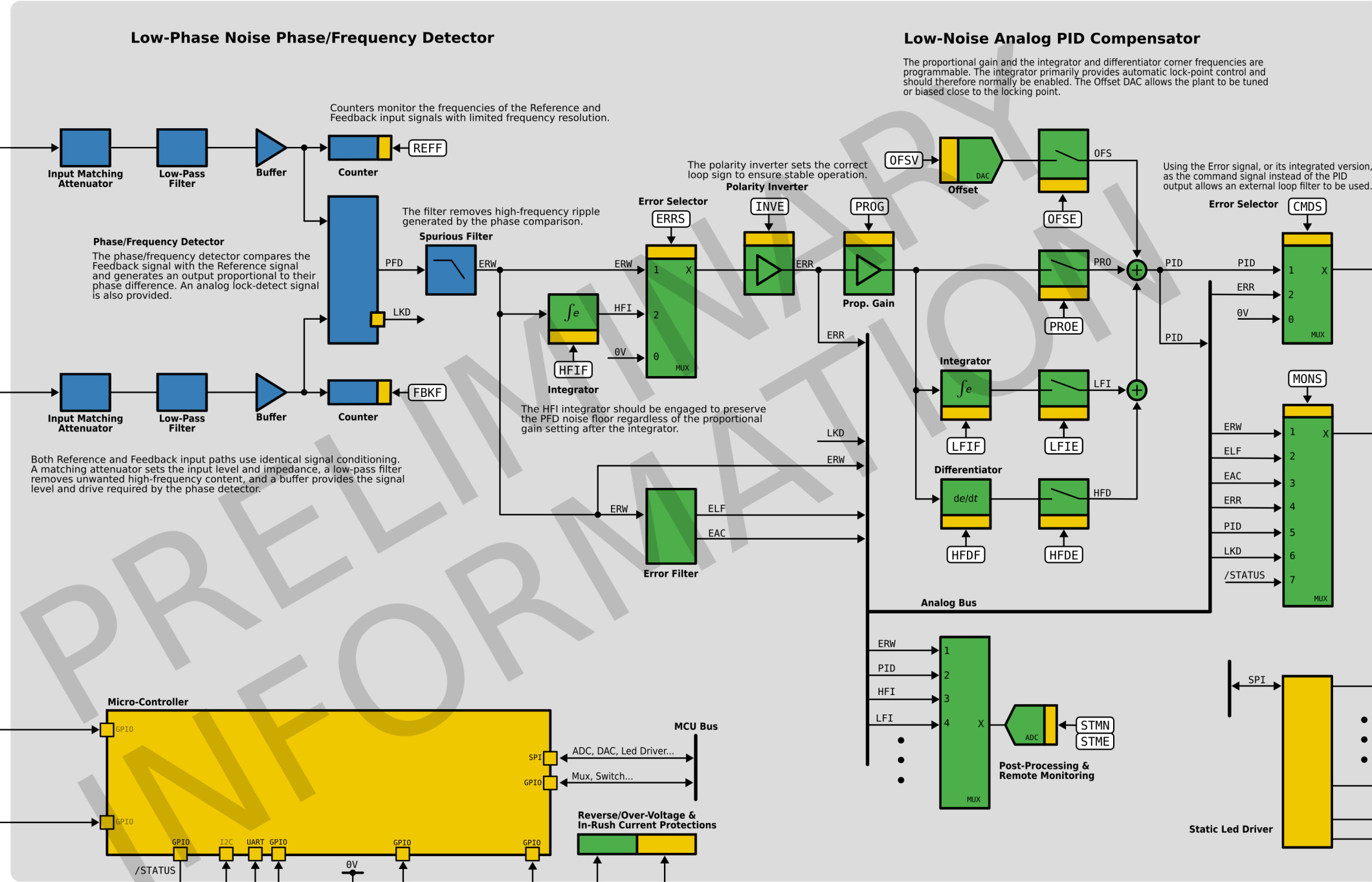
UTB, EXP **DIO{0,1}**

Reserved for future use.

Firmware Cfg Switches

PCB **FCFG{0-3}**

Reserved for future use.



The module is controlled through these lines.

The diagram shows a timing sequence for power-up. A green bar represents the P15V signal, which is active from the start until a point marked by a vertical line. A yellow bar represents the P24V, P5V, N5V, and DGND signals, which are active from the start until a point marked by a vertical line. A third yellow bar represents the PWRGD signal, which is active from the start until a point marked by a vertical line. The labels {P15V, N15V, AGND}, {P24V, P5V, N5V, DGND}, and PWRGD are shown next to their respective bars. The label BKP is shown next to each bar.

The module is powered via these lines.

- Only main functionalities are represented. Refer to the *User's Guide* for detailed information.
- Refer to the *User's Programming Guide* for a complete description of the remote control commands.

Symbols	Locations	Domains
 Testpoint	PCB Printed circuit board	 Optical
 Coaxial connector	BKP Backplane connector	 Microwave
 I/O	UTB User's terminal blocks	 RF
 Indicator	EXP Expansion connector	 Analog (LF)
 Command	FP Front panel	 Digital (LF)
 Jumper		

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	Description Functional block diagram.	
	Drawing No. SK352-SG01-P26A	
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