**PANEL SUBSYSTEM HSLA**

**1. Description  
Handles high-speed lane adjustment for products in transit.**

**2. Functions**

* **Adjusts lanes based on the product's size and configuration.**
* **Works with diverters and other transport mechanisms.**

**3. I/O and Signals**

| **Signal Name** | **Type** | **Description** | **Panel** |
| --- | --- | --- | --- |
| **HSLA\_ADJUST\_CMD** | **DO** | **Activate lane adjustment** | **PANEL\_CONTROL\_RIO** |
| **HSLA\_POSITION\_FB** | **DI** | **Feedback on lane position** | **PANEL\_CONTROL\_RIO** |

**4. Interlocks & Safety**

* **Inhibits lane adjustment during transport or jam.**

**5. Dependencies**

* **Dependent on PHOTO\_EYE\_TRK for item detection.**

**6. Alarms**

| **Alarm ID** | **Condition** | **Message** |
| --- | --- | --- |
| **A\_HSLA\_01** | **Lane adjustment failure** | **"HSLA Fault"** |

**7. HMI / Operator Interaction**

* **Lane position indicator on HMI.**
* **Manual lane override option.**