

Luckfox Lyra - созда- ем графику с помо- щью Slint

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1. Графические библиотеки

- LVGL
- Slint

2. Slint

Бекенды:

- qt
- winit
- linuxkms

Рендеры:

- qt (soft)
- software
- femtovg (OpenGL)
- skia (OpenGL / Vulkan / soft)

3. Конфигурация buildroot

- Target packages -> Libraries -> Hardware handling -> libinput
- Target packages -> Libraries -> Hardware handling -> libxkbcommon
- Target packages -> Libraries -> Graphics -> fontconfig

4. Создаём проект

```
cargo new slint
```

5. Cargo.toml

```
slint = { version = "*", default-  
features = false, features = [  
    "compat-1-2",  
    "backend-linuxkms-noseat",  
    "renderer-skia",  
] }
```

```
[build-dependencies]  
slint-build = "*"
```

6. main.slint

```
export component MainWindow inherits
Window {
    width: 800px;
    height: 480px;
    default-font-size: 20px;

    property <int> counter;

    VerticalLayout {
        alignment: center;
        spacing: 30px;
        width: 200px;

        ...
    }
}
```


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```
Button {  
  width: 100%;  
  height: 80px;  
  text: "Увеличить";  
  clicked => {  
    counter += 1;  
  }  
}  
  
Text {  
  text: "Счётчик: " + counter;  
  horizontal-alignment: center;  
}
```

7. build.rs

```
fn main() {  
    let config = slint_build  
        ::CompilerConfiguration::new()  
        .with_style("cupertino-  
dark".into());  
    slint_build  
        ::compile_with_config  
        ("main.slint", config)  
        .unwrap();  
}
```

8. main.rs

```
use slint::include_modules;

include_modules!();

fn main() {
    MainWindow::new().unwrap()
        .run().unwrap();
}
```

9. Сборка

```
cargo build --target="armv7-unknown-  
linux-gnueabihf" --release; scp  
target/armv7-  
unknown-linux-gnueabihf/release/  
slint root@target:/root/
```

10. Сборка с помощью cross

Установка:

```
cargo install cross
```

Cargo.toml:

```
[package.metadata.cross.target.armv7-  
unknown-linux-gnueabihf]  
image = "ghcr.io/slint-ui/slint/  
armv7-unknown-linux-gnueabihf"
```

Сборка:

```
cross build --target="armv7-unknown-  
linux-gnueabihf" --release; scp  
target/armv7-  
unknown-linux-gnueabihf/release/  
slint root@target:/root/
```

11. Использование примеров

```
git clone https://github.com/slinter-ui/slinter.git
```

12. Energy monitor

Cargo.toml:

```
slint = { version = "*", default-features = false, features = [
    "compat-1-2",
    "backend-linuxkms-noseat",
    "renderer-skia",
] }
```

```
[package.metadata.cross.target.armv7-unknown-linux-gnueabihf]
image = "ghcr.io/slint-ui/slint/armv7-unknown-linux-gnueabihf"
```

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Сборка и загрузка:

```
cross build --target="armv7-unknown-  
linux-gnueabihf" --release
```

```
scp ../../target/armv7-unknown-  
linux-gnueabihf/release/energy-  
monitor root@target:/root
```


13. Home automation

Cargo.toml:

```
slint = { version = "*", default-  
features = false, features = [  
    "compat-1-2",  
    "backend-linuxkms-noseat",  
    "renderer-skia",  
] }
```

```
[package.metadata.cross.target.armv7-  
unknown-linux-gnueabihf]  
image = "ghcr.io/slint-ui/slint/  
armv7-unknown-linux-gnueabihf"
```

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Сборка и загрузка:

```
cross build --target="armv7-unknown-  
linux-gnueabihf" --release
```

```
scp ../../../../target/armv7-unknown-  
linux-gnueabihf/release/  
home-automation root@target:/root
```

14. О нас

- разработка печатных плат
- изготовление плат и монтаж компонентов
- разработка ПО (ESP, Linux)

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