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*  
*      The First Stable Libcamera Release  
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*      | (o) |  
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*  
*      A Call For Public API Review  
*  
*  
*  
*      Jacopo Mondi  
*      the libcamera team  
*      ELC-E 2019  
*      Lyon, FR  
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* - Project Highlights  
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* - Project Highlights  
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* -- Started in late 2018, we're very young  
* -- 5 part time core developers  
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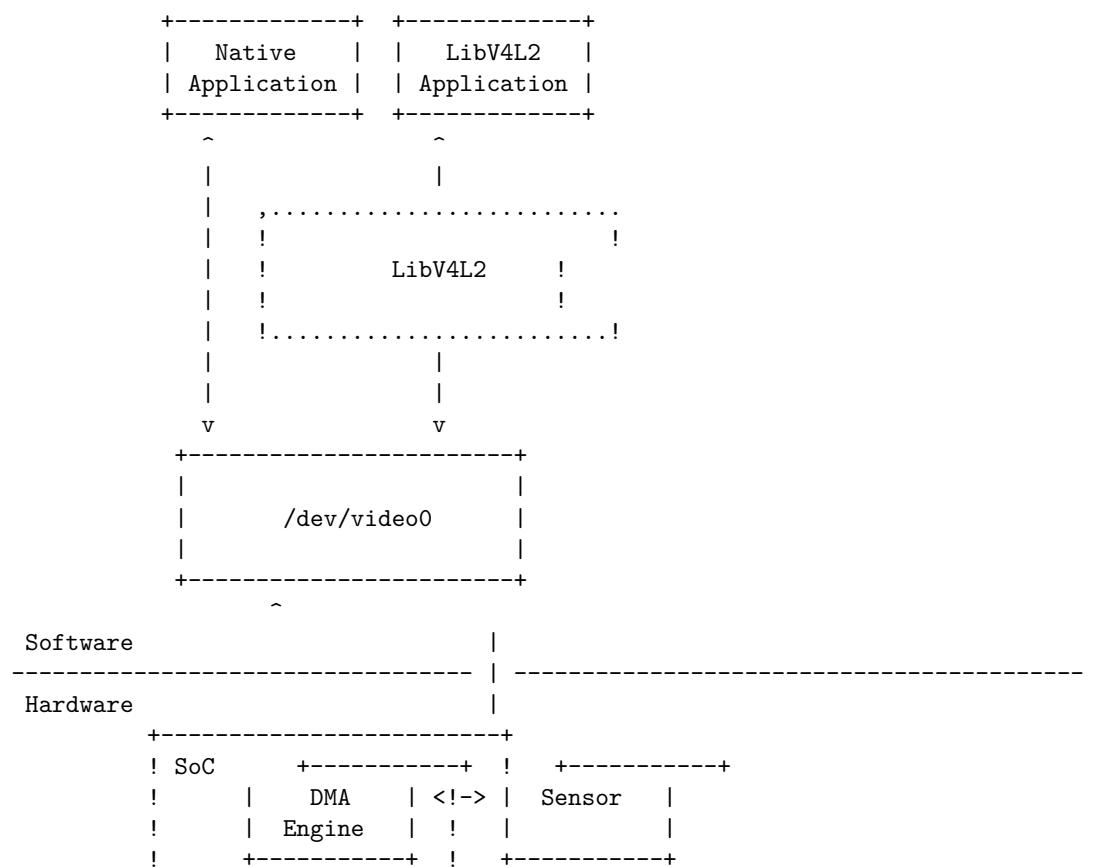
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* - Project Highlights  
*  
* -- Started in late 2018, we're very young  
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*  
* -- Target mainline(-ish) kernel versions  
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* -- Support for a limited but increasing number of platforms:  
*   - Intel IPU3  
*   - Rockchip RK3399  
*   - In progress:  
*     - RaspberryPi 3 and 4  
*     - UVC cameras  
*     - VIMC test driver  
*     - next ?  
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* - Project Highlights
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*   - In progress:
*     - RaspberryPi 3 and 4
*     - UVC cameras
*     - VIMC test driver
*     - next ?
*
* - Contacts
*   - libcamera.org
*   - #libcamera @freenode
*   - git://linuxtv.org/libcamera.git
*   - https://lists.libcamera.org/listinfo/libcamera-devel
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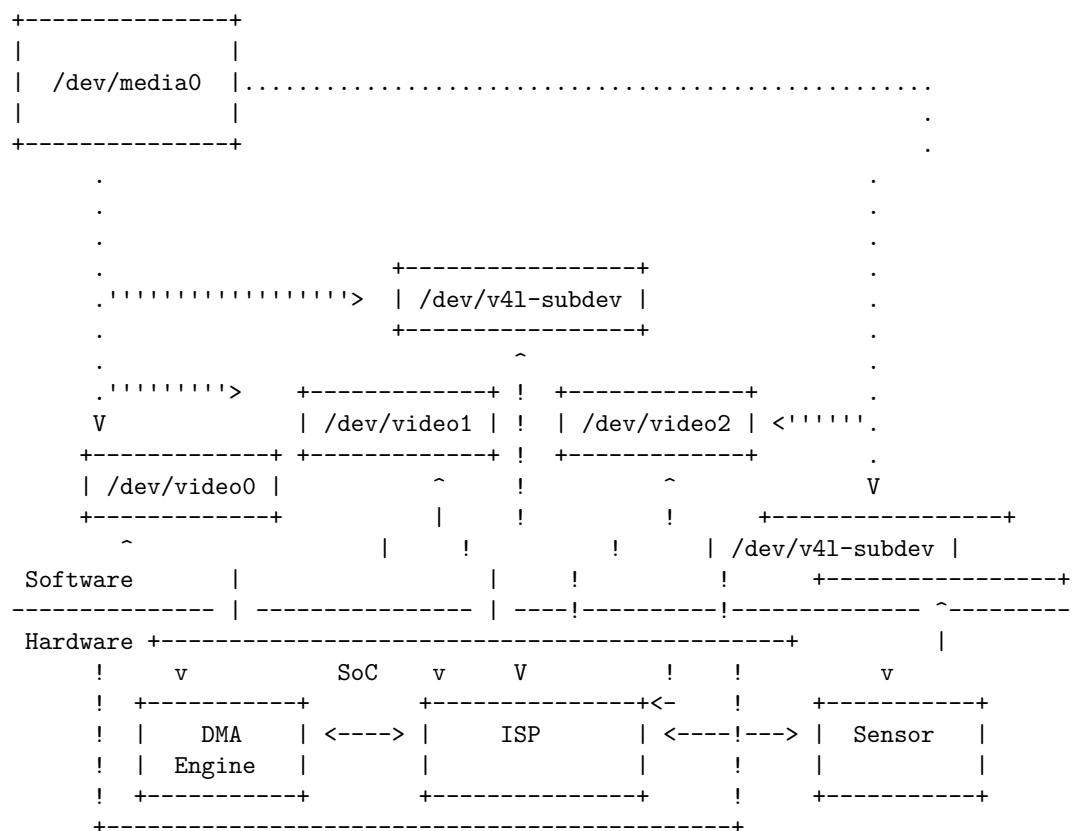
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*  
* - Technical motivations and resources  
*  
*  
* Laurent @ELC-E 2018: Kickstart  
* - https://www.youtube.com/watch?v=GIhV7tiUji0  
*  
*  
* Jacopo @FOSDEM 2019: First supported platform  
* - https://video.fosdem.org/2019/K.4.401/cameras.webm  
*  
*  
* Kieran @Linaro Connect 2019: Second supported platform  
* - https://connect.linaro.org/resources/bkk19/bkk19-506/  
*  
*  
* Laurent @OSS-J 2019: Android Camera HAL  
* - No video available :(  
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Where we come from
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Where are we today



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a c / +-----+ +-----+ +-----+ +-----+
p a | | Native | | Framework | | Native | | Android |
p t | | V4L2 | | Application | | libcamera | | Camera |
l i | | Application | | (gstreamer) | | Application | | Framework |
i o \ +-----+ +-----+ +-----+ +-----+
      n           ^           ^           ^           ^
      |           |           |           |           |
l a           |           |           |           |
i d           v           v           v           v
b a / +-----+ +-----+ +-----+
c p | | V4L2 | | Camera | | Android |
a t | | Compat. | | Framework | | Camera |
m a | |           | | (gstreamer) | | HAL |
e t \ +-----+ +-----+ +-----+
r i           ^           ^           ^           ^
a o           |           |           |           |
n           |           |           |           |
/           |           ,.....: Language : !
|           |           ! : Bindings : !
i r           |           ! : (optional) : !
b a           |           \.....: .....: !
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/*****< libcamera Public API >*****
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-----< libcamera Public API >-----
^           ^
|           |
v           v
+-----+ +-----+
|   Camera    | | Camera Device
|   Devices    | | +-----+
|   Manager    | | | Device-Agnostic
+-----+ | |
^           | |
|           | |
v           v
+-----+ +-----+
| { +-----+ } |
| } | ////Image//// | { |
| <-> | /Processing// | } |
| } | /Algorithms// | { |
| { +-----+ } |
| ~~~~~~ |
| ====== |
| +-----+ |
| | //Pipeline/// | |
| <-> | ///Handler/// | |
| | /////////// | |
+-----+ +-----+
|                         Device-Specific
+-----+
|           ^
|           |
v           v
+-----+
| Helpers and Support Classes
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*****</ libcamera Public API >*****
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* Slide deck available at  
* - https://jmondi.org/cgit/elce2019  
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* Slide deck available at  
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* - https://jmondi.org/cgit/elce2019  
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*  
* Over-commented libcamera example application  
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* - https://jmondi.org/cgit/elce-cam  
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*  
*  
* Over-commented libcamera example application  
*  
* - https://jmondi.org/cgit/elce-cam  
*  
*  
* And now..  
*  
* live coding (wish me luck)  
*  
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*****/
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