

1. OpenCL 설치

- OpenCL 헤더

```
sudo apt-get install openccl-headers
```

2. 필요 패키지 설치

```
sudo apt-get install build-essential git unzip wget cmake libgtk2.0-dev pkg-config yasm
```

```
sudo apt-get install libjpeg-dev libtiff5-dev libpng-dev
```

```
sudo apt-get install ffmpeg libavcodec-dev libavformat-dev libswscale-dev libxvidcore-dev libx264-dev libxine2-dev
```

```
sudo apt-get install libgtk-3-dev
```

```
sudo apt-get install mesa-utils libgl1-mesa-dri libgtkgl2.0-dev libgtkglext1-dev
```

```
sudo apt-get install libatlas-base-dev gfortran libeigen3-dev
```

3. FFMPEG 설치

```
wget https://ffmpeg.org/releases/ffmpeg-snapshot.tar.bz2 -O ffmpeg-snapshot.tar.bz2
```

```
mkdir libffmpeg
```

```
tar -xvf ffmpeg-snapshot.tar.bz2 -C libffmpeg --strip-components=1
```

```
rm ffmpeg-snapshot.tar.bz2
```

```
cd libffmpeg
```

```
./configure --enable-shared --disable-doc
```

```
sudo make
```

```
sudo make install
```

4. OpenCV 4.4 설치

- opencv 및 추가 모듈 소스 파일 다운로드

```
mkdir opencv
```

```
cd opencv
```

```
wget -O opencv.zip https://github.com/opencv/opencv/archive/4.4.0.zip
```

```
unzip opencv.zip
```

```
wget -O opencv_contrib.zip https://github.com/opencv/opencv\_contrib/archive/4.4.0.zip
```

```
unzip opencv_contrib.zip
```

- 소스 빌드

```
cd opencv-4.4.0
```

```
mkdir build
```

```
cd build
```

```
cmake -D CMAKE_BUILD_TYPE=RELEASE ₩
```

```
-D CMAKE_C_COMPILER=/usr/bin/gcc ₩
```

```
-D CMAKE_INSTALL_PREFIX=/usr/local ₩
```

```
-D INSTALL_PYTHON_EXAMPLES=OFF ₩
```

```
-D INSTALL_C_EXAMPLES=OFF ₩
```

```
-D BUILD_DOCS=OFF ₩
```

```
-D BUILD_PERF_TESTS=OFF ₩
```

```
-D BUILD_TESTS=OFF ₩
```

```
-D BUILD_PACKAGE=OFF ₩
```

```
-D BUILD_EXAMPLES=OFF ₩
```

```
-D WITH_TBB=ON ₩
```

```
-D ENABLE_FAST_MATH=1 ₩
```

```
-D CUDA_FAST_MATH=1 ₩
```

```

-D WITH_IPP=OFF ₩
-D WITH_V4L=OFF ₩
-D WITH_1394=OFF ₩
-D WITH_GTK=ON ₩
-D WITH_QT=OFF ₩
-D WITH_OPENGL=ON ₩
-D WITH_EIGEN=ON ₩
-D WITH_FFMPEG=ON ₩
-D BUILD_JAVA=OFF ₩
-D OPENCV_GENERATE_PKGCONFIG=ON ₩
-D OPENCV_ENABLE_NONFREE=ON ₩
-D OPENCV_EXTRA_MODULES_PATH=../opencv_contrib-4.4.0/modules ..

```

❖ 주의: 결과에서 아래 그림과 같이 FFMPEG 지원을 반드시 확인해야한다.

```

-- Video I/O:
--   FFMPEG:                YES
--   avcodec:                YES (58.54.100)
--   avformat:               YES (58.29.100)
--   avutil:                 YES (56.31.100)
--   swscale:                YES (5.5.100)
--   avresample:             NO

```

```
time make -j$(nproc)
```

```
sudo make install
```

```
cat /etc/ld.so.conf.d/*
```

결과에 /usr/local/lib를 포함하는지 확인, 없다면 추가해준다.

```
sudo ldconfig
```

5. Vivante Player git clone

git clone <https://github.com/EThe0n/Vivante.git>

6. Make

cd player

make

7. 실행

./player ../video/<video name>