CBL(Size, Stride, Filters)

CONVOLUTIONAL
Kernel Size: **Size[IN]**
Stride: **Stride[IN]**
Filters: **Filters[IN]**
Padding: **1**

Batch Normalization

Leaky ReLU

Padding = 0 se
Size = 1x1

CSP(Filters)

Pré-processamento

CBL
Kernel Size: **3x3**
Stride: **1**
Filters: **Filters[IN]**

Divisão de dados
ROUTE

Bloco de Transformação

CBL
Kernel Size: **3x3**
Stride: **1**
Filters: **Filters[IN]/2**

CBL
Kernel Size: **3x3**
Stride: **1**
Filters: **Filters[IN]/2**

Concatenação
ROUTE

CBL
Kernel Size: **1x1**
Stride: **1**
Filters: **Filters[IN]**

Concatenação
ROUTE

Caminho de Identidade

FPN(Camada Externa)

Seleciona o feature map
ROUTE

Reduz os Canais
CBL
Kernel Size: **1x1**
Stride: **1**
Filters: **128**

UPSAMPLE
Stride: **2**

Concatenação
ROUTE

Refina
CBL
Kernel Size: **3x3**
Stride: **1**
Filters: **256**

Conexão Lateral:
Camada Externa[IN]

BACKBONE

Imagem

416x416x3

[0]
CBL
Kernel Size: **3x3**
Stride: **2**
Filters: **32**

208x208x32

[1]
CBL
Kernel Size: **3x3**
Stride: **2**
Filters: **64**

104x104x64

[2-8]
CSP
Filters: **64**

104x104x64

[9]
MAXPOOL
Kernel Size: **2x2**
Stride: **2**

52x52x64

[10-16]
CSP
Filters: **128**

52x52x128

[17]
MAXPOOL
Kernel Size: **2x2**
Stride: **2**

26x26x128

[18-24]
CSP
Filters: **256**

26x26x256

[25]
MAXPOOL
Kernel Size: **2x2**
Stride: **2**

13x13x256

[26]
CBL
Kernel Size: **3x3**
Stride: **1**
Filters: **512**

26x26x256 ---- **[23]**

13x13x512

HEAD 1

[30]
YOLO
Inferência

13x13x255

[29]
CONVOLUTIONAL
Kernel Size: **1x1**
Stride: **1**
Filters: **255**
Padding: **0**

13x13x512

[28]
CBL
Kernel Size: **3x3**
Stride: **1**
Filters: **512**

13x13x256

[27]
CBL
Kernel Size: **1x1**
Stride: **1**
Filters: **256**

HEAD 2

[37]
YOLO
Inferência

26x26x255

[36]
CONVOLUTIONAL
Kernel Size: **1x1**
Stride: **1**
Filters: **255**
Padding: **0**

NECK

26x26x256

[31-35]
FPN
Camada Externa: **23**

CBL
Kernel Size: **3x3**
Stride: **2**
Filters: **32**

CBL
Kernel Size: **3x3**
Stride: **2**
Filters: **64**

CSP
Filters: **64**

MAXPOOL
Kernel Size: **2x2**
Stride: **2**

CSP
Filters: **128**

MAXPOOL
Kernel Size: **2x2**
Stride: **2**

CSP
Filters: **256**

MAXPOOL
Kernel Size: **2x2**
Stride: **2**

CBL
Kernel Size: **3x3**
Stride: **1**
Filters: **512**