WHAT IS CLAIMED IS:

1. A camera assembly (100), comprising at least two image sensors (12), wherein each image sensor (12) comprises:

a pixel array (122), comprising a light sensing region (1222) and an imaging region (1224); and

a control circuit (124), configured to:

receive a light sensing instruction from a processor (200) of the electronic device (1000) to control the light sensing region (1222) to detect an illumination intensity; and

receive an imaging instruction from the processor (200) of the electronic device (1000) to control the light sensing region (1222) to obtain a red pixel value, a blue pixel value or a green pixel value corresponding to each pixel so as to detect a color temperature of a current environment, the color temperature reflecting a gain value of each color (R, G, B) in light of the current environment; and

control the imaging region (1224) to perform a photographic process and realize imaging to obtain a plurality of pixel values, and enable the processor (200) to adjust the gain values of color R, G or B of each pixel in the imaging region according to the color temperature to acquire a color-temperature adjusted image.

2. The camera assembly (100) according to claim 1, wherein the imaging region (1224) of each image sensor (12) is contiguous and located in the middle of the pixel array (122), and the light sensing region (1222) of each image sensor (12) is located around the imaging region (1224); and/or

the pixel array (122) of each image sensor (12) is configured such that at least one of following conditions is satisfied: a ratio of an area of the imaging region (1224) of said image sensor (12) to an area of the pixel array (122) of said image sensor (12) being greater than or equal to 0.6; and a ratio of an area of the light sensing region (1222) of said image sensor (12) to the area of the pixel array (122) of said image sensor (12) being greater than or equal to 0.1.

3. The camera assembly (100) according to claim 2, wherein the light sensing region (1222) of each image sensor (12) comprises at least two light sensing sub-regions (1225) having basically a same area and spaced from each other.

4. The camera assembly (100) according to claim 3, wherein,

the at least two light sensing sub-regions (1225) comprise a left light sensing sub-region (1226) on the left of the imaging region (1224) and a right light sensing sub-region (1227) on the right of the imaging region (1224); wherein the left light sensing sub-region (1226) and the right light sensing sub-region (1227) are arranged symmetrically, the left light sensing sub-region (1226) is configured to detect a left illumination intensity, the right light sensing sub-region (1227) is configured to detect a right illumination intensity, and the illumination intensity detected by the light sensing region (1222) is a mean value of the left illumination intensity and the right illumination intensity; or

the at least two light sensing sub-regions (1225) comprise an upper light sensing sub-region (1228) above the imaging region (1224) and a lower light sensing sub-region (1229) below the imaging region (1224); wherein the upper light sensing sub-region (1228) and the lower light sensing sub-region (1229) are arranged symmetrically, the upper light sensing sub-region (1228) is configured to detect an upper illumination intensity, the lower light sensing sub-region (1229) is configured to detect a lower illumination intensity, and the illumination intensity detected by the light sensing region (1222) is a mean value of the upper illumination intensity and the lower illumination intensity; or

the at least two light sensing sub-regions (1225) comprise a left light sensing sub-region (1226) on the left of the imaging region (1224), a right light sensing sub-region (1227) on the right of the imaging region (1224), an upper light sensing sub-region (1228) above the imaging region (1224) and a lower light sensing sub-region (1229) below the imaging region (1224); wherein the left light sensing sub-region (1226) and the right light sensing sub-region (1227) are arranged symmetrically, the upper light sensing sub-region (1228) and the lower light sensing sub-region (1228) are arranged symmetrically, the left light sensing sub-region (1226) is configured to detect a left illumination intensity, the right light sensing sub-region (1227) is configured to detect a right illumination intensity, the upper light sensing sub-region (1228) is configured to detect an upper illumination intensity, the lower light sensing sub-region (1229) is configured to detect a lower illumination intensity, and the illumination intensity detected by the light sensing region (1222) is a mean value of the left illumination intensity, the right illumination intensity, the upper illumination intensity and the lower illumination intensity.

5. The camera assembly (100) according to any of claims 1-4, wherein

the pixel array (122) is in a shape of one of a circle and an ellipse, the imaging region (1224)

is in a shape of an inscribed rectangle of the pixel array (122), and the light sensing region (1222) comprises a region other than the inscribed rectangle of the one of the circle and the ellipse; and/or

the pixel array (122) is in a shape of a rectangle, the imaging region (1224) is in a shape of one of an inscribed circle and an inscribed ellipse of the pixel array (122), and the light sensing region (1222) comprises a region other than the one of the inscribed circle and the inscribed ellipse of the rectangle.

6. The camera assembly (100) according to any of claims 1-4, wherein the camera assembly (100) comprises two image sensors (12), the imaging region (1224) of each image sensor (12) is contiguous and the light sensing region (1222) of each image sensor (12) is contiguous; the imaging region (1224) and the light sensing region (1222) of each image sensor (12) share a common boundary, and two imaging regions (1224) of the two image sensors (12) are located between two light sensing regions (1222) of the two image sensors (12).

7. A mobile electronic device (1000), comprising a camera assembly (100) according to any of claims 1-6 and a processor (200); wherein,

the processor (200) is configured to generate the light sensing instruction and the imaging instruction.

8. The mobile electronic device (1000) according to claim 7, wherein the mobile electronic device (1000) comprises one camera assembly (100) configured as a front camera assembly (100a);

wherein when light sensing regions (1222) of at least two image sensors (12) of the camera assembly (100) detect a first illumination intensity and a second illumination intensity respectively, the processor (200) is configured to:

determine a maximum of the first illumination intensity and the second illumination intensity as a final illumination intensity; or

obtain a mean value of the first illumination intensity and the second illumination intensity as a final illumination intensity.

9. The mobile electronic device (1000) according to claim 7, wherein the mobile electronic device (1000) comprises at least two camera assemblies (100), one of the at least two camera assemblies (100) is configured as a front camera assembly (100a) and a further one of the at least two camera assemblies (100) is configured as a rear camera assembly (100b);

wherein when two light sensing regions (1222) of the front camera assembly (100a) detect a

first illumination intensity and a second illumination intensity respectively, and two light sensing regions (1222) of the rear camera assembly (100b) detect a third illumination intensity and a fourth illumination intensity respectively, the processor (200) is configured to:

determine a maximum of the first illumination intensity, the second illumination intensity, the third illumination intensity and the fourth illumination intensity as a final illumination intensity; or

obtain a mean value of the first illumination intensity and the second illumination intensity as a front illumination intensity, obtain a mean value of the third illumination intensity and the fourth illumination intensity as a rear illumination intensity, and determine a maximum of the front illumination intensity and the rear illumination intensity as a final illumination intensity; or

determine a maximum of the first illumination intensity and the second illumination intensity as a front illumination intensity, obtain a mean value of the third illumination intensity and the fourth illumination intensity as a rear illumination intensity, and determine a maximum of the front illumination intensity and the rear illumination intensity as a final illumination intensity; or

obtain a mean value of the first illumination intensity and the second illumination intensity as a front illumination intensity, determine a maximum of the third illumination intensity and the fourth illumination intensity as a rear illumination intensity, and determine a maximum of the front illumination intensity and the rear illumination intensity as a final illumination intensity.

10. The mobile electronic device (1000) according to claim 7, wherein the mobile electronic device (1000) comprises at least two camera assemblies (100), one of the at least two camera assemblies (100) is configured as a front camera assembly (100a) and a further one of the at least two camera assemblies (100) is configured as a rear camera assembly (100b);

wherein when a light sensing region (1222) of the front camera assembly (100a) detects a first illumination intensity, and a light sensing region (1222) of the rear camera assembly (100b) detects a second illumination intensity, the processor (200) is configured to:

determine a maximum of the first illumination intensity and the second illumination intensity as a final illumination intensity.

11. The mobile electronic device (1000) according to claim 7, wherein the mobile electronic device (1000) comprises at least two camera assemblies (100), one of the at least two camera assemblies (100) is configured as a front camera assembly (100a) and a further one of the at least two camera assemblies (100) is configured as a rear camera assembly (100b);

wherein when two light sensing regions (1222) of the front camera assembly (100a) detect a

first illumination intensity and a second illumination intensity respectively, and a light sensing region (1222) of the rear camera assembly (100b) detects a third illumination intensity, the processor (200) is configured to:

determine a maximum of the first illumination intensity and the second illumination intensity as a front illumination intensity, and determine a maximum of the front illumination intensity and the third illumination intensity as a final illumination intensity; or

obtain a mean value of the first illumination intensity and the second illumination intensity as a front illumination intensity, and determine a maximum of the front illumination intensity and the third illumination intensity as a final illumination intensity.

12. The mobile electronic device (1000) according to claim 7, wherein the mobile electronic device (1000) comprises at least two camera assemblies (100), one of the at least two camera assemblies (100) is configured as a front camera assembly (100a) and a further one of the at least two camera assemblies (100) is configured as a rear camera assembly (100b);

wherein when a light sensing region (1222) of the front camera assembly (100a) detects a first illumination intensity, and two light sensing regions (1222) of the rear camera assembly (100b) detect a second illumination intensity and a third illumination intensity respectively, the processor (200) is configured to:

determine a maximum of the second illumination intensity and the third illumination intensity as a rear illumination intensity, and determine a maximum of the rear illumination intensity and the first illumination intensity as a final illumination intensity; or

obtain a mean value of the second illumination intensity and the third illumination intensity as a rear illumination intensity, and determine a maximum of the rear illumination intensity and the first illumination intensity as a final illumination intensity.

13. The mobile electronic device (1000) according to any of claims 7-12, further comprising another camera assembly (600), wherein the another camera assembly (600) comprises an image sensor (30) comprising:

a pixel array (32), comprising a light sensing region (322) and an imaging region (324); and

a control circuit (34), configured to:

determine whether the another camera assembly (600) is in an imaging mode;

receive a light sensing instruction from the processor (200) to control the light sensing region (322) of the image sensor (30) of the another camera assembly (600) to detect an

illumination intensity when the another camera assembly (600) is not in the imaging mode; and

receive an imaging instruction from the processor (200)to control the light sensing region (322) to obtain a red pixel value, a blue pixel value or a green pixel value corresponding to each pixel so as to detect a color temperature of a current environment, the color temperature reflecting a gain value of each color (R, G, B) in light of the current environment; and control the imaging region (324) of the image sensor (30) of the another camera assembly (600) to perform a photographic process and realize imaging to obtain a plurality of pixel values, and enable the processor (200) to adjust the gain values of color R, G or B of each pixel in the imaging region according to the color temperature to acquire a color-temperature adjusted image when the another camera assembly (600) is in the imaging mode.