Claims:

1. A time-of-flight (TOF) and/or CCD ~~Sensor~~ sensor apparatus ~~(1, 11), in particular a time-of-flight (TOF) and/or CCD sensor apparatus~~ for a 3-D camera sensor, which comprises at least one analog and one digital circuit component and an analog/digital converter ~~(8)~~ for converting analog signals of the analog circuit component into digital signals for the digital circuit component ~~(2)~~, and vice versa, wherein the analog circuit component and the digital circuit component in each case comprise at least one module for electronically implementing a function, and wherein one of the at least one module~~s~~ of the analog circuit component is ~~embodied as~~ a sensor device ~~(3)~~ for detecting electromagnetic radiation and one of the at least one module~~s~~ of the digital circuit component is ~~embodied as~~ a signal processing device for processing digital signals, ~~characterized in that~~wherein the circuit components including the analog/digital converter are integrated as an integrated circuit in a chip and the chip is manufactured as a semiconductor structure using 1-poly technology.

2. Sensor apparatus according to Claim 1, ~~characterized in that~~wherein at least one of the modules of the digital circuit component is ~~embodied as~~ a non-volatile memory, ~~in particular as an EEPROM (6, 25) (electrically erasable programmable read-only memory),~~ for storing configuration parameters.

3. Sensor apparatus according to Claim 2, wherein the non-volatile memory is an EEPROM (electrically erasable programmable read-only memory).

~~3~~4. Sensor apparatus according to ~~either~~ any of the preceding claims, ~~characterized in that~~wherein the digital circuit component is manufactured using CMOS technology.

~~4~~5. Sensor apparatus according to ~~any of the preceding claims~~Claim 3, ~~characterized in that~~wherein the EEPROM ~~(6, 25)~~ is ~~embodied as an~~ FGFET (floating gate field effect transistor).

~~5~~6. Sensor apparatus according to ~~any of the preceding claims~~Claim 5, ~~characterized in that~~wherein the FGFET comprises a control gate structure with a buried layer (buried control gate).

~~6~~7. Sensor apparatus according to any of the preceding claims, ~~characterized in that~~wherein subnominal gaps are formed in the analog circuit component and/or subnominal lines are formed in the digital circuit component.

~~7~~8. Sensor apparatus according to any of the preceding claims, ~~characterized in that~~wherein the digital circuit component comprises at least one of the following modules:

- an apparatus ~~(7)~~ for controlling a phase shift, in particular a DLL (delay-locked loop),
- a timer resonant circuit ~~(7)~~, in particular a PLL (phase-locked loop).

~~8~~9. Sensor apparatus according to any of the preceding claims, ~~characterized in that~~wherein the analog circuit component comprises at least one of the following modules:

- a sensor for detecting radiation together with a structure for transporting induced free charge carriers,
- an amplifier,
- a voltage regulator,
- a voltage converter ~~(4)~~,
- a temperature sensor for detecting and correcting temperature-dictated drift.

~~9~~10. Sensor apparatus according to any of the preceding claims, ~~characterized in that~~wherein the analog

circuit components are designed for higher voltages than the digital circuit components.

~~10~~11. Sensor apparatus according to any of the preceding claims, ~~characterized in that~~wherein the analog and digital circuit components comprise semiconductor components having oxide layers for electrical insulation, in particular having a gate oxide layer, wherein at least one of the oxide layers of the analog circuit components is ~~embodied as~~ thicker than that of the digital circuit components.

~~11~~12. Sensor apparatus according to any of the preceding claims, ~~characterized in that~~wherein the gate oxide layer of the analog circuit component has a thickness of 9 nanometers to 15 nanometers, the gate oxide layer of the EEPROM has a thickness of 6 nanometers to 10 nanometers, and the gate oxide layer of the remaining digital circuit component has a thickness of 1.5 nanometers to 3 nanometers.

~~12~~13. Method for producing a sensor apparatus according to any of the preceding claims~~.~~, the method comprising,

providing one analog and one digital circuit component and an analog/digital converter for converting analog signals of the analog circuit component into digital signals for the digital circuit component, and vice versa, wherein the analog circuit component and the digital circuit component in each case comprise at least one module for electronically implementing a function, and wherein one of the at least one module of the analog circuit component is a sensor device for detecting electromagnetic radiation and one of the at least one module of the digital circuit component is a signal processing device for processing digital signals,

integrating the circuit components including the analog/digital converter as an integrated circuit in a chip, and

using 1-poly technology to manufacture the chip as a semiconductor structure.

~~13~~14. Method according to any of the preceding claims, ~~characterized in that~~wherein at least one part of the method comprises a 200 nm CMOS manufacturing method.

~~14~~15. Method according ~~to any of the preceding claims~~Claims 13 or 14, ~~characterized in that~~wherein subnominal gaps and/or subnominal lines of the sensor apparatus are produced by means of a bi-subnominal etching method.

~~15~~16. Detection apparatus~~ (10)~~, in particular a monitoring apparatus for monitoring the movement of a movement element against undesired collisions with an object, ~~characterized in that~~wherein a sensor apparatus according to any of ~~the preceding claims~~Claims 1 to 12 is provided for detecting the object.