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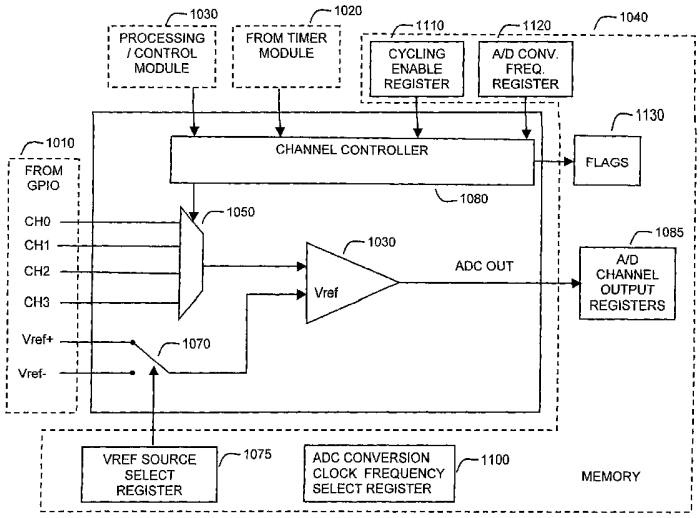
(54) Title: PROGRAMMABLE AUTO-CONVERTING ANALOG TO DIGITAL CONVERSION MODULE



(57) Abstract: A method and device automatically convert a plurality of analog input channels using a single analog to digital conversion circuit. The device includes a multiplexer, an analog to digital conversion circuit and a configurable channel controller. The multiplexer has at least two analog input channels. The multiplexer also has control inputs and an output. The analog to digital conversion circuit is coupled to the output of the multiplexer and a clock signal. The analog to digital conversion circuit outputs a conversion value based on a voltage associated with the output of the multiplexer in successive clock cycles. The configurable channel controller outputs a control signal to the control inputs of the multiplexer to automatically select successive ones of the at least two analog input channels for conveying to the analog to digital conversion circuit.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H03M G06F H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 668 273 A (MERLIN GERIN) 24 April 1992 (1992-04-24)	1-3,7, 10-12
A	abstract page 1, line 1 - line 26 page 2, line 5 - line 9 page 2, line 16 -page 3, line 16 page 3, line 21 - line 26 page 4, line 7 - line 20 page 5, line 26 -page 7, line 23 claims 1,5 --- -/--	4-6,8,9, 13-16

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
26 July 2002	02/08/2002

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Lai, C

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 474 024 A (MOTOROLA INC) 11 March 1992 (1992-03-11)	1-3,7, 10-14
A	abstract page 2, line 49 -page 3, line 6 page 5, line 5 -page 6, line 8 page 8, line 16 -page 9, line 20	4-6,8,9, 15,16

INTERNATIONAL SEARCH REPORT

Information on patent family members

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