

June 2, 2023

**Interim letter of reference**

Sonova is a global leader in innovative hearing care solutions: from personal audio devices and wireless communication systems to audiological care services, hearing aids and cochlear implants. The Group was founded in 1947 and is headquartered in Stäfa, Switzerland. Sonova operates through four businesses – Hearing Instruments, Audiological Care, Consumer Hearing and Cochlear Implants – and the core brands Phonak, Unitron, AudioNova, Sennheiser (under license) and Advanced Bionics as well as recognized regional brands. The Group's globally diversified sales and distribution channels serve an ever growing consumer base in more than 100 countries.

Sonova Communications AG (former Phonak Communications AG) is part of the Sonova Group and specializes in the development, production, marketing and global distribution of ultra-miniaturized wireless solutions for hearing impaired people, as well as for communication devices.

Pascal Geiser, born on August 15, 1980, from Laugenthal/BE, has been employed by our company as Senior Embedded Software Platform Architect in our Platform Software department since May 1, 2006.

Pascal Geiser's duties and responsibilities in this capacity primarily comprise:

- Defines embedded software platforms for wireless communication devices: toolchain, architecture, development and test
- Responsibility as engineer manager and product owner for the full applications of the wireless components
- Management and close collaboration with work package leaders developing specific functionalities
- Architecture interface with other teams: System On Chip and Product Software
- Expert role for concept and architecture of new systems and product combinations
- Expert for software project planning: structuration of development, definition of milestones and work packages, effort estimation, requirements on development methodologies including test driven development
- Definition of Continuous Integration tools for integrating code changes from all contributors of the software projects
- Management and support of the Devops engineer, automatizing and maintaining Continuous Integration infrastructure and servers
- Continuous improvement on security, performance and innovation
- Documentation and training of teams in various topics

Over the years, the developments driven by Pascal Geiser, represent 3 major system platforms for wireless components, delivering multiple receiver and transmitter families, supporting proprietary and standard protocols like Bluetooth, combined for building networked communication systems.

Pascal Geiser possesses remarkable and profound expertise and above-average experience in his area of responsibility and in related fields. He successfully applies himself to new duties and

Sonova Communications AG  
Herrenschwandweg 4  
CH-3280 Murten  
Switzerland

Phone +41 58 928 91 00  
info@phonak-communications.com  
<https://www.phonak-communications.com>

**roger**

uses the knowledge he acquires with outstanding results. Even when working under extreme pressure, he remains highly focused and delivers an outstanding performance.

Pascal Geiser demonstrates outstanding initiative and remarkable commitment to his area of responsibility. Even when working under pressure or faced with challenging situations, he is capable of adapting immediately to changes in circumstances and remains remarkably calm and assured. Pascal Geiser has a wealth of specific ideas for improvements and he is proactive and creative when working on innovation and reform. The way he coordinates tasks and projects is highly rational, flexible and goal oriented. He always pays close attention to the requisite quality and quantity parameters. In the performance of his duties, he always adheres to internal quality standards, applies them correctly and draws others' attention to them.

Pascal Geiser demonstrates an excellent ability to advise staff constructively and to help them leverage their resources effectively and deliver tangible results. By maintaining an excellent network of connections in his working and professional life, he is able to draw on highly valuable contacts. With his exceptional flair for communication, he can connect with a wide range of stakeholders and tailor his messages to the hierarchical level he is addressing. With his impressive negotiating skills, he is capable of developing consensual solutions, no matter how tense the situation. Pascal Geiser systematically analyses his performance and makes a point of acquiring feedback from others to improve his own professionalism. By ensuring that customers needs and concerns are met quickly and completely, he demonstrates a high awareness of customer focus. He is an exemplary team player, presents his views with immense cogency and clarity, and is a keen participant in discussions of a professional nature. He has a highly developed sense of self-confidence and a particularly compelling, credible presence. Management, staff and customers alike appreciate him greatly and hold him in high esteem. We have come to know Pascal Geiser as an exceptionally valuable employee who displays an unequivocal devotion to his duties and to the interests of the company.

This interim reference has been provided at Pascal Geiser's request. We thank him for his valuable cooperation so far and hope we can count on his commitment for a long time to come.

Sonova Communications AG



Thomas von Dach  
Teamleader Platform Software



Raphaëlle Flourié  
Head HR Sonova Communications AG



**Phonak Communications AG**

Laenggasse 17  
3280 Murten · Schweiz

Telefon +41 26 672 96 72

Fax +41 26 672 33 44

[www.phonak-communications.com](http://www.phonak-communications.com)

Murten in May 2012

## **Interim letter of reference**

**Pascal Geiser**, born on August 15, 1980, from Langenthal/BE, has been employed in our company since May 1, 2006 in the position of Software Engineer. Phonak Communications AG is part of the Sonova Group and specializes in the development, production, marketing and global distribution of ultra-miniaturized wireless solutions for hearing impaired persons.

The main duties of Pascal Geiser are:

- Architecture: definition of new hardware and software platforms
- System design: Evaluation and choice of micro-controllers and peripherals for transmitters platforms (Atmel's ARM7 & ARM9, STM32 cortex-M3).
- Design of software architectures for new receivers and transmitters.
  
- Development environment, tool-chain
- Design and implementation of flexible Python-based build system (make replacement) integrated in Eclipse IDE, featuring static analysis, coding style enforcement, automatic documentation extraction, multiple compiler support and others.
- Maintenance and upgrade of GNU GCC tool-chain for ARM and WIN32.
- Installation and maintenance of the software team server comprising Subversion version control, Mantis bug tracker, Trac as wiki and ticketing system, WebSVN as web-based diff tool.
  
- Continuous Integration, quality improvements
- Buildbot setup and administration: continuous integration server to automate build and test cycles.
- Setup of the unit test framework with nightly reporting.
- Integration of automatic documentation extraction with Doxygen and Sphinx (reStructured text documentation tool), static analysis of code and automatic warning of developers not documenting their code.
- Coding guidelines and help defining the software development methodology.
  
- Embedded software development
- Programming in C, C++, C#, Arm assembly, Python, development on Atmel's ARM7, ARM9, STM32 cortex-m3, Windows.
- Low-level architecture: operating system integration, driver development for components and interfaces including USB HID and MSD, I2C, SPI, I2S.

Page 2 of 2

In May 2012

- Development of firmware for low-power hybrid integrated receivers featuring both an 8 bit micro-controller and a DSP. System definition, implementation, integration, test and manufacturing tools.
- New feature prototyping: audio streaming and recording, video playback, touch-screens.
- Others
  - Pascal Geiser is the representative of the team leader
  - Management of external developers: planning, work package definition, reporting
  - Training of new engineers
  - Development of PC tools for manufacturing and debugging in C++ and C#.

Pascal Geiser is a highly reliable and conscientious engineer who applies his very extensive experience appropriately to every situation.

Pascal Geiser makes very valuable contributions and consistently produces results under deadline pressure. He is always very open-minded about new projects and we know him to be an extremely proactive team member, always putting forward excellent ideas. He approaches tasks in a focused way, acts independently and fulfils his tasks quickly and extremely efficiently.

With his invariably friendly and courteous manner, Pascal Geiser contributes well to a highly positive working atmosphere and fosters and actively promotes quality collaboration within the team. A calm and competent dialog partner, even in challenging or uncomfortable situations, he is reliable, conscientious, trustworthy and responsible at all times. Pascal is well-liked and respected by clients, colleagues and superiors alike.

In addition, Pascal Geiser identifies well with our company's culture, takes his share of responsibility in every situation and is consistently focused on the client's wishes. In projects he sets a clear, well-explained framework of activities, allows people to be themselves and delegates according to his colleagues' abilities.

This interim reference has been written at Pascal Geiser's request. We would like to take this opportunity to thank him for his valuable work at Phonak and look forward to continuing our fruitful collaboration with him well into the future.

Phonak Communications AG



Thomas von Dach  
Teamleader Software Engineering



Katharina Mathys  
Manager Human Resources a.i.